

Aerospace and Defense Short Form Catalog 2007

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International
IOR Rectifier

Aerospace and Defense Products Short Form Catalog 2007

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Dedicated To The Development Of High Reliability Products For The Aerospace and Defense Market

International Rectifier is dedicated to the development of products for high reliability and life-critical applications. Our products, ranging from stand-alone discrete components to complex hybrid power module assemblies and rugged DC-DC converters, utilize leading-edge power technology which, together with demanding environmental specifications including vibration/shock, temperature, and space radiation, help aerospace and defense engineers to meet their toughest design challenges.

Core Competencies

- Motion control IP
- DC-DC converter power IP
- Radiation effects and robustness expertise
- Multiple assembly technologies (MCM, SMT on PCB)
- Packaging technology
- Wafer fab capability
- Extensive Military and Space heritage
- Custom design services

Product Focus

- Motion Control modules (digital, H bridge, 1/2 Bridge, etc.)
- Standard and custom RAD-Hard DC-DC converter modules
- Military and High temperature DC-DC converter modules
- Power MOSFET and IGBT Modules
- RAD-Hard MOSFETs and drivers
- Hermetic and QPL power discrete devices
- RAD-Hard Solid State Relays

Key Capabilities

SILICON TECHNOLOGY

- RAD-Hard™ Power MOSFETs
- RAD-Hard™ CMOS gate drivers
- High-Density Power MOSFETs
- IGBTs
- Soft Recovery & Fast Recovery Power Rectifiers
- Fast Recovery Epitaxial Diodes
- Synchronous Rectifiers
- Bipolar PWM ICs
- Low-Dropout Regulators
- Voltage Regulators
- CMOS Driver ICs
- Solid State Relays

SPECIAL CAPABILITIES

- Soft-Solder Semiconductor & Substrate Attach
- Conductive & Non-Conductive Adhesives:
 - Epoxy
 - Silicone
 - Eutectic Alloy
 - Solder
- Eutectic Die Attach

QUALITY CERTIFICATIONS

- MIL-PRF 38534 "Class H & K" Qualified
- MIL-PRF 19500, JANTX, JANTXV and JANS Qualified
- ISO 9001 Certified
- ISO 14001 Certified

PROCESS CAPABILITY

- Thick-Film Screening & Firing
- Furnace Substrate & Die Attach
- Manual & Automatic Wire Bonding Processes (Gold & Aluminum)
 - Thermo-compression
 - Ultrasonic
 - Thermo-sonic
- Projection Weld & Seam Sealing
 - Parallel Resistance Seam Sealing
 - One Shot Resistance Seam Sealing
 - Vacuum Furnace Soldering
- Automatic Electrical Test
- Full In-House Reliability Screening
- Surface Mount on PCB Assembly
- Chip on board

SUBSTRATE MATERIALS

- Direct Bonded Copper
 - BeO, AlN, Al₂O₃
- Multi-Layer Thick Film
 - BeO, Al₂O₃ (up to seven conductor layers)
- Insulated Metal Substrates

PACKAGE SELECTION

- Hermetic and Industrial Custom Packages
- DIPs, SIPs, Large Multi-Lead Configurations
- TO-204, TO-205, TO-254, TO-257, TO-258, TO-259, TO-267
- Low-Profile Hi-Power Flat Packs
- Surface Mount Packages (LCC Series, SMD Series, D2, D3)

Quality Conformance Testing

Unlike standard commercial products, high reliability products must be submitted to various levels of quality conformance testing to ensure that the products are capable of performing to specifications in the often harsh environments of military and space applications. Both the United States and the European community have each developed specifications that detail the sequence of quality conformance testing.

In the United States, the Defense Supply Center Columbus (DSCC) is the controlling agency and has issued specifications that govern the quality conformance testing sequence performed on semiconductor devices and hybrid modules, namely MIL-PRF-19500/MIL-STD-750, MIL-PRF-38534/MIL-STD-883 and MIL-PRF-38535/MIL-STD-883.

MIL-PRF-19500/MIL-STD-750 are the controlling specifications for discrete semiconductors such as diodes and power MOSFETs. MIL-PRF-19500 directs discrete semiconductors to be manufactured to either JAN, JANTX, JANTXV, or JANS levels. (Note: the JAN level is not allowed for MOSFETs).

MIL-PRF-38535/MIL-STD-883 are the controlling specifications for integrated circuit semiconductors, voltage regulators and operational amplifiers. MIL-STD-883 directs these products to be manufactured to class level B or class level S.

MIL-PRF-38534/MIL-STD-883 are the controlling specifications for power hybrids. MIL-STD-883 directs hybrids to be manufactured to class H or class K. International Rectifier currently does not have a DSCC Certified RAD-Hard Assurance Program.

International Rectifier Aerospace and Defense Products Group manufactures and tests hermetic products to one of three distinct quality conformance levels: (1) commercial hermetic, (2) source control drawing (SCD), or (3) MIL-PRF-19500, MIL-PRF-38534, MIL-PRF-38535 qualified. The Aerospace and Defense Products Group also provides screened plastic encapsulated devices.

Glossary:

Class H: Class H is the standard military quality level provided in MIL-PRF-38534, General Specification for Hybrid Microcircuits.

Class K: Class K is the highest reliability level provided in MIL-PRF-38534, General Specification for Hybrid Microcircuits. It is intended for space applications.

Level B: Class level B defines the screening requirements for high reliability military applications as specified in MIL-STD-883 and is intended for use in military products.

Level S: Class level S defines the screening requirements for high reliability space applications as specified in MIL-STD-883 and is intended for use in space products.

JAN: JAN (Joint Army Navy) is the prefix assigned by the DSCC to designate devices on the DSCC qualified parts list.

JANTX: Military screening level as specified in MIL-PRF-19500 for a DSCC qualified device.

JANTXV: Military with visual inspection screening level as specified in MIL-PRF-19500 for a DSCC qualified device.

JANS: Space level screening as specified in MIL-PRF-19500 for a DSCC qualified device.

Screening and Testing Requirements

The screening and testing sequences of all MIL-Qualified products are standardized around the general specifications previously noted. The screening and testing flows detailing the qualification process to these general specifications are referenced below:

MIL-PRF-19500 Screening Requirements

TEST / INSPECTION	SCREENING LEVEL			MIL-STD-750
	JANTX	JANTXV	JANS	Method
Internal visual inspection (precap)	—	100%	100%	2073,2074,2072
Temperature cycling (temp.cycle) 20 cycles, > 10 minutes @ temperature extremes	100%	100%	100%	1051
Thermal impedance	100%	100%	100%	3161,3101,3103
Constant acceleration 20 kG or 10kG > 10W	—	—	100%	2006
Particle impact noise detection (P.I.N.D. – devices with internal cav.)	—	—	100%	2052 Condition A
Hermetic seal (fine and gross leak)	Optional	Optional	Optional	1071
Serialization of devices	—	—	100%	
Interim electrical parameters	—	—	100% R&R	
High temperature gate bias (within X hrs) MOSFETs, IGBTs	100%	100% (48 hrs)	100% (48 hrs)	1042 (48 hrs)
Condition B 100%	100%	Interim electrical and delta parameters		100%
(within X hrs) High temperature reverse bias (hours minimum) MOSFETs, IGBTs	(24 hrs) 100% (160 hrs)	(24 hrs) 100% (160 hrs)	(16 hrs) 100% (240 hrs)	1042 Condition A
Diodes	100%	100%	100%	1038
	(96 hrs)	(96 hrs)	(240 hrs)	Condition B
Final electrical test and delta parameters	100%	100%	100%	
Hermetic seal (fine and gross leak)	100%	100%	100%	1071
Radiography	—	—	100%	2076
External visual exam (after complete marking)	—	—	100%	2071

MIL-STD-883 Screening Requirements
for class level S and level B

TEST/INSPECTION	SCREENING LEVEL		MIL-STD-883
	Level B	Level S	Method
Non-destructive bond pull	—	100%	2023
Internal visual inspection	100%	100%	2010,condition B for class level B 2010,condition A for class level S
Temperature cycling	100%	100%	1010, condition C
Constant acceleration	100%	100%	2001, condition E
External visual inspection	100%	100%	
P.I.N.D	—	100%	2020,condition A for class level S
Serialization	—	100%	
Preburn-in electrical parameters	100%	100%	
Burn-in	100%	100%	1015
	160 hours	240 hours	
Interim electrical parameters	—	100%	
High Temperature Reverse Bias (HTRB)	—	100%	1015, condition A or C
		72 hours	
Interim electrical parameters	100%	100%	
Percent defective allowable (PDA) calculation	5%	5%	
Final electrical test			
	Static @ 25°C	100%	100%
	Static @ min and max temps	100%	100%
	Switching test @ 25°C	100%	100%
Hermetic seal (fine and gross leak)	100%	100%	1014
Radiography	—	100%	2012
External visual inspection	100%	100%	2009

MIL-PRF-38534 Screening Requirements

TEST/INSPECTION	SCREENING LEVEL		MIL-STD-883
	Class H	Class K (Space Level)	Method
Pre Seal Burn-In	Optional	Optional	1030
Nondestructive Bond Pull	N/A	100%	2023
Internal Visual	100%	100%	2017
Temperature Cycle	100%	100%	1010
Constant Acceleration	100%	100%	2001
P.I.N.D.	N/A	100%	2020
Pre Burn-In Electrical	Optional	100%	
Burn-In	100%	100%	1015
Final Electrical	100%	100%	
Seal	100%	100%	1014
Radiographic	N/A	100%	2012
External Visual	100%	100%	2009

The Aerospace and Defense Products group has also established a standard, cost-effective screening program known as the QIRL program. Standard “off the shelf,” Space, JANTXV or JANTX level product can be designated as QIRL. These products are fully compliant with all screening and Quality Conformance Inspection (QCI) requirements of MIL-PRF-19500 for Space, JANTXV or JANTX levels. They meet the same data sheet electrical and mechanical specifications, and are produced and tested on a JANS qualified line.

MIL-PRF-19500, Group A Inspection Electrical Verification

Sub Group	Parameters	JANS Quantity (accept number)	JANTX, JANTXV Quantity (accept number)
1	Visual and mechanical inspection	15 (0)	45 (0)
2	DC (static) test at +25°C	116 (0)	116 (0)
3	DC (static) tests at max. and min. temps.		116 (0)
4	Dynamic tests at +25°C		116 (0)
5	Safe operating area test (power trans.): a. DC b. Clamped inductive c. Unclamped inductive End point electrical measurements	45 (0)	45 (0)
6	Surge current (diodes and rectifiers) End point electrical measurements		22 (0)
7	Selected static and dynamic tests		22 (0)

MIL-PRF-19500, Group B Inspection
Mechanical Verification

Sub Group	Parameters	JANS, Large Lot Quantity (accept number)	JANS, Small Lot Quantity (accept number)
1	Physical dimensions	22 (0)	8 (0)
2	Solderability	15 Leads (0)	6 Leads (0)
	Resistance to solvents	15 (0)	6 (0)
3	Temperature cycling (100 cycles)	22 (0)	6 (0)
	Surge (diodes only)		
	Hermetic seal (fine and gross leak)		
	Electrical measurements	6 (0)	6 (0)
	Decap internal visual		
	Bond strength	22 wires (0) or 11 (0)	12 wires (0) or 6 (0)
	SEM (when specified)	6 (0)	
	Die shear	11 (0)	6 (0)
4	Intermittent op. life	22 (0)	12 (0)
	Electrical measurements		
5	Accelerated HTRB (120 hrs)	22 (0)	12 (0)
	Electrical measurements		
	Accelerated HTGB (24 hrs)		
	Electrical measurements	20 wires (0)	20 wires (0)
	Bond strength		
6	Thermal resistance	22 (0)	8 (0)

MIL-PRF-19500, Group B Inspection
Mechanical Verification

Sub Group	Parameters	JANTX, JANTXV Large Lot Quantity (accept number)	JANTX, JANTXV Small Lot Quantity (accept number)
1	Solderability	15 Leads (0)	4 Leads (0)
	Resistance to solvents	15 (0)	3 (0)
2	Temperature cycling (45 cycles, including screening) Thermal shock (10 cycles) Hermetic seal (fine and gross leak) Electrical measurements	22 (0)	6 (0)
3	Steady state op. life or intermittent op. life Electrical measurements	45 (0)	12 (0)
	Bond strength	11 wires (0)	11 wires (0)
4	Decap internal visual	1 (0)	1 (0)
	SEM (when specified)*	6 (0)	6 (0)
5	Thermal resistance	15 (0)	6 (0)
6	High temperature life (340 hours) non-operating* Electrical measurements	32 (0)	12 (0)

* Note; Not applicable for power MOSFETs

MIL-PRF-19500, Group C Inspection Long Term/Reliability Verification

Sub Group	Parameters	All Quality Levels Large Lot Quantity (accept number)	All Quality Levels Small Lot Quantity (accept number)
1	Physical dimensions	15 (0)	6 (0)
2	Thermal shock Terminal strength Hermetic seal (fine and gross leak) Moisture resistance Electrical measurements	22 (0)	6 (0)
3	Shock Vibration, variable frequency Constant acceleration Electrical measurements	22 (0)	6 (0)
4	Salt atmosphere (corrosion)	15 (0)	6 (0)
5	N/A		
6	Steady state op. life or intermittent op. life or blocking life Electrical measurements	22 (0)	12 (0)
7	Internal water vapor	3 (0) or 5(1)	3 (0) or 5 (1)

MIL-PRF-19500, Group D Inspection Radiation Hardness Assurance Program

Sub Group	Parameters	JANTXV Inspection Lot Quantity (accept number)	JANS Wafer Quantity (accept number)
2	Steady-state total dose irradiation Qualification	11 (0)	4 (0) See Note 1. 2 (0) See Note 2. 1 (0) See Note 3.
	CI	11 (0)	4 (0) See Note 1. 2 (0) See Note 2. 1 (0) See Note 3.

1. For device types $\geq 4,000$ die per wafer

2. For device types > 500 and $< 4,000$ die per wafer

3. For device types ≤ 500 die per wafer

MIL-PRF-19500, Group E Inspection Package Qualification

Subgroup	Parameters	All Quality Levels Quantity (accept number)
1	Thermal shock (100 cycles) or Temp. cycling (500 cycles min.) Electrical measurements	per MIL-PRF-19500
2	Steady state op. life Electrical measurements	per MIL-PRF-19500
3	Destructive physical analysis	per MIL-PRF-19500
4	Thermal resistance	22 (0)
5	Barometric pressure (derives with rated voltage > 200V)	15 (0)
6	ESD	3 (0)

MIL-PRF-38534, Group A Electrical Testing

Subgroup	Parameters	Quantity (accept number)
1	Static tests at +25°C	116 (0)
2	Static tests at max. rated operating temp.	76 (0)
3	Static tests at min. rated operating temp.	45 (0)
4	Dynamic tests at +25°C	116 (0)
5	Dynamic tests at max. rated operating temp.	76 (0)
6	Dynamic tests at min. rated operating temp.	45 (0)
7	Functional tests at +25°C	116 (0)
8	Functional tests at max. and min. rated operating temp.	76 (0)
9	Switching tests at +25°C	116 (0)
10	Switching tests at max. rated operating temp.	76 (0)
11	Switching tests at min. rated operating temp.	45 (0)

MIL-PRF-38534, Group B Testing

Subgroup	Parameters	Quantity (accept number)	Class	
			K	H
1	Physical dimension	2 (0)	X	X
2	P.I.N.D.	15 (0)	X	
3	Resistance to solvents	3 (0)	X	X
4	Internal visual and mechanical	1 (0)	X	X
5	Bond strength: a. Thermocompression b. Ultrasonic or wedge c. Flip-chip d. Beam lead	2 (0)	X	X
6	Die shear strength	2 (0)	X	X
7	Solderability	1 (0)	X	X
8	Seal: a. Fine b. Gross	15 (0)		X
9	ESD: a. Electrical parameters b. ESDS c. Electrical parameters	3 (0)	X	X

MIL-PRF-38534, Group C Testing

Subgroup	Parameters	Quantity (accept number)	Class	
			K	H
1	External visual	5 (0)	X	X
	P.I.N.D.		X	X
	Temperature cycling		X	
	Temperature cycling or Thermal shock			X
				X
	Mechanical Shock and/or Constant acceleration		X	X
			X	X
	Seal (fine and gross)		X	X
	P.I.N.D.		X	X
	Visual examination		X	X
	End-point electrical		X	X
2	Steady-state life test	22 (0) or 5 (0)	X	X
	End-point electrical		X	X
3	Internal water vapor content	3 (0) or 5 (1)	X	X
4	Internal visual and mechanical	2 (0)	X	X
	Wire bond strength		X	X
	Element shear		X	X

MIL-PRF-38534, Group D Package Related Testing

Subgroup	Parameters	Quantity (accept number)
1	Thermal shock	5 (0)
	Stabilization bake	5 (0)
	Lead integrity	1 (0)
	Seal: a. Fine b. Gross	5 (0)
2	Salt atmosphere	5 (0)
3	Metal package isolation	3 (0)

MIL-PRF-38535, Group A Electrical Testing

Subgroup	Parameters	Quantity (accept number)
1	Static tests at +25°C	116 (0)
2	Static tests at max. rated operating temp.	116 (0)
3	Static tests at min. rated operating temp.	116 (0)
4	Dynamic tests at +25°C	116 (0)
5	Dynamic tests at max. rated operating temp.	116 (0)
6	Dynamic tests at min. rated operating temp.	116 (0)
7	Functional tests at +25°C	116 (0)
8	Functional tests at max. and min. rated operating temp.	116 (0)
9	Switching tests at +25°C	116 (0)
10	Switching tests at max. rated operating temp.	116 (0)
11	Switching tests at min. rated operating temp.	116 (0)

MIL-PRF-38535, Group B Testing

Subgroup	Parameters	Minimum Sample Size Quantity (accept number)
1	Resistance to solvents	3 (0)
2	Bond strength: a. Thermocompression b. Ultrasonic c. Flip-chip d. Beam lead	22 (0) Based on the number of wires
	Die shear test or stud pull	3 (0)
3	Solderability	per MIL-PRF-38535

MIL-PRF-38535, Group C Testing

Subgroup	Parameters	Quantity (accept number)
1	Steady-state life test End-point electrical parameters	45 (0)

MIL-PRF-38535, Group D Testing

Subgroup	Parameters	Quantity (accept number)
1	Physical dimensions	15 (0)
2	Lead integrity Seal (fine and gross)	15 (0)
3	Thermal Shock Temperature cycling Moisture resistance Seal (fine and gross) Visual End-point electricals	15 (0)
4	Shock Vibration, variable frequency Acceleration Seal (fine and gross) Visual	15 (0)
5	Salt atmosphere Seal (fine and gross) Visual	15 (0)
6	Internal water vapor (cavity packages)	3 (0) or 5 (1)
7	Adhesion of lead finish	15 (0)
8	Lid torque	5 (0)

JEDEC Cross Reference

JEDEC Part Number	IR Part Number	JANTX	JANTXV	JANS	RAD Hard
2N6756	IRF130	X	X		
2N6758	IRF230	X	X		
2N6760	IRF330	X	X		
2N6762	IRF430	X	X		
2N6764	IRF150	X	X		
2N6766	IRF250	X	X		
2N6768	IRF350	X	X		
2N6770	IRF450	X	X		
2N6782	IRFF110	X	X		
2N6782U	IRFE110	X	X		
2N6784	IRFF210	X	X		
2N6784U	IRFE210	X	X		
2N6786	IRFF310	X	X		
2N6786U	IRFE310	X	X		
2N6788	IRFF120	X	X		
2N6788U	IRFE120	X	X		
2N6790	IRFF220	X	X		
2N6790U	IRFE220	X	X		
2N6792	IRFF320	X	X		
2N6792U	IRFE320	X	X		
2N6794	IRFF420	X	X		
2N6794U	IRFE420	X	X		
2N6796	IRFF130	X	X		
2N6796U	IRFE130	X	X		
2N6798	IRFF230	X	X		
2N6798U	IRFE230	X	X		
2N6800	IRFF330	X	X		
2N6800U	IRFE330	X	X		
2N6802	IRFF430	X	X		
2N6802U	IRFE430	X	X		
2N6804	IRF9130	X	X		
2N6806	IRF9230	X	X		
2N6845	IRFF9120	X	X		
2N6845U	IRFE9120	X	X		
2N6847	IRFF9220	X	X		
2N6847U	IRFE9220	X	X		
2N6849	IRFF9130	X	X	X	
2N6849U	IRFE9130	X	X	X	
2N6851	IRFF9230	X	X	X	
2N6851U	IRFE9230	X	X	X	
2N7218	IRFM140	X	X		
2N7218U	IRFN140	X	X		
2N7219	IRFM240	X	X		
2N7219U	IRFN240	X	X		
2N7221	IRFM340	X	X		
2N7221U	IRFN340	X	X		
2N7222	IRFM440	X	X		
2N7222U	IRFN440	X	X		
2N7224	IRFM150	X	X		
2N7224U	IRFN150	X	X		
2N7225	IRFM250	X	X		

JEDEC Cross Reference (cont.)

JEDEC Part Number	IR Part Number	JANTX	JANTXV	JANS	RAD Hard
2N7225U	IRFN250	X	X		
2N7227	IRFM350	X	X		
2N7227U	IRFN350	X	X		
2N7228	IRFM450	X	X		
2N7228U	IRFN450	X	X		
2N7236	IRFM9140	X	X	X	
2N7236U	IRFN9140	X	X	X	
2N7237	IRFM9240	X	X	X	
2N7237U	IRFN9240	X	X	X	
2N7261	IRHF7130			X	X
2N7261U	IRHE7130			X	X
2N7262	IRHF7230			X	X
2N7262U	IRHE7230			X	X
2N7268	IRHM7150			X	X
2N7268U	IRHN7150			X	X
2N7269	IRHM7250			X	X
2N7269U	IRHN7250			X	X
2N7270	IRHM7450			X	X
2N7270U	IRHN7450			X	X
2N7334	IRFG110	X	X		
2N7335	IRFG9110	X	X		
2N7336	IRFG6110	X	X		
2N7337	IRFG9110	X	X		
2N7380	IRHY7130CM			X	X
2N7381*	IRHY7230CM			X	X
2N7382	IRHY9130			X	X
2N7383*	IRHY9230			X	X
2N7389	IRHF9130			X	X
2N7389U	IRHE9130			X	X
2N7390*	IRHF9230			X	X
2N7390U	IRHE9230			X	X
2N7391	IRHM7360SE			X	X
2N7392*	IRHM7460SE			X	X
2N7394	IRHM7054			X	X
2N7394U	IRHN7054			X	X
2N7422	IRHM9150			X	X
2N7422U	IRHN9150			X	X
2N7423	IRHM9250			X	X
2N7423U	IRHN9250			X	X
2N7424	IRHM9064			X	X
2N7424U	IRHNA9064			X	X
2N7425	IRHM9160			X	X
2N7425U	IRHNA9160			X	X
2N7426	IRHM9260			X	X
2N7426U	IRHNA9260			X	X
2N7431	IRHM7064			X	X
2N7431U	IRHNA7064			X	X
2N7432	IRHM7160			X	X
2N7432U	IRHNA7160			X	X
2N7433	IRHM7260			X	X
2N7433U	IRHNA7260			X	X

* Part is being re-qualified at leominster facility

JEDEC Cross Reference (cont.)

JEDEC Part Number	IR Part Number	JANTX	JANTXV	JANS	RAD Hard
2N7434*	IRHM7264SE			X	X
2N7444	IRHM7260SE			X	X
2N7463T2*	IRHF7330SE			X	X
2N7463U5*	IRHE7330SE			X	X
2N7464T2	IRHF7430SE			X	X
2N7464U5*	IRHE7430SE			X	X
2N7465T3*	IRHY7330CMSE			X	X
2N7465U3	IRHNJ7330SE			X	X
2N7466T3*	IRHY7430CMSE			X	X
2N7466U3*	IRHNJ7430SE			X	X
2N7467U2	IRHNA57Z60			X	X
2N7468U2	IRHNA57064			X	X
2N7469U2	IRHNA57160			X	X
2N7470T1	IRHMS57064			X	X
2N7471T1	IRHMS57160			X	X
2N7472U2	IRHNA57163SE			X	X
2N7473U2	IRHNA57260SE			X	X
2N7474U2	IRHNA57264SE			X	X
2N7475T1	IRHMS57163SE			X	X
2N7476T1	IRHMS57260SE			X	X
2N7477T1	IRHMS57264SE			X	X
2N7478T1	IRHMS57Z60			X	X
2N7479U3	IRHNJ57Z30			X	X
2N7480U3	IRHNJ57034			X	X
2N7481U3	IRHNJ57130			X	X
2N7482T3	IRHY57Z30CM			X	X
2N7483T3	IRHY57034CM			X	X
2N7484T3	IRHY57130CM			X	X
2N7485U3	IRHNJ57133SE			X	X
2N7486U3	IRHNJ57230SE			X	X
2N7487U3	IRHNJ57234SE			X	X
2N7488T3	IRHY57133CMSE			X	X
2N7489T3	IRHY57230CMSE			X	X
2N7490T3	IRHY57234CMSE			X	X
2N7491T2	IRHF57Z30			X	X
2N7492T2	IRHF57034			X	X
2N7493T2	IRHF57130			X	X
2N7494U5	IRHE57Z30			X	X
2N7495U5	IRHE57034			X	X
2N7496U5	IRHE57130			X	X
2N7497T2	IRHF57133SE			X	X
2N7498T2	IRHF57230SE			X	X
2N7499T2	IRHF57234SE			X	X
2N7500U5	IRHE57133SE			X	X
2N7501U5	IRHE57230SE			X	X
2N7502U5	IRHE57234SE			X	X

* Part is being re-qualified at leominster facility

RAD-Hard MOSFETs

IR H S M 5 9 7 2 6 0 C M SE SCS C

TRANSISTOR TYPE

H — Radiation Hardened MOSFET®
HL — Radiation Hardened
Logic Level MOSFET

SYNCHRONOUS RECTIFIER

Blank — RAD-Hard MOSFET
S — Synchronous Rectifier
SL — Synchronous Rectifier (Low Inductance)

PACKAGE DESIGNATOR

BLANK — TO-204AA, AE	N — SMD 1
C — Chip	NA — SMD 2
E — LCC-18	NB — SMD 3
EA — LCC-28 Pin (Single Die)	NJ — SMD 0.5
F — TO-205AF	Q — LCC-28 Pin (Quad Pack)
G — MO-036AB	V — TO-258AA
I — TO-259AA	Y — TO-257AA
M — TO-254AA	YA — Tabless TO-257AA w/ straight leads
MA — Tabless TO-254AA w/ straight leads	YB — Tabless Low Ohmic TO-257AA w/ straight leads
MB — Tabless Low Ohmic TO-254AA w/ straight leads	YJ — Standard Ohmic D2
MJ — Standard Ohmic D3	YK — Low Ohmic D2
MK — Low Ohmic D3	YS — Low Ohmic TO-257AA
MS — Low Ohmic TO-254	UB — LCC-3

TECHNOLOGY

Blank — Gen 4
5 — R5
6 — R6
7 — R7

TYPE OF CHANNEL

Blank — N-Channel
6 — Mixed N and P Channel
9 — P-Channel

TOTAL DOSE DESIGNATOR

Blank — Non-RAD or 100K Rads P-Channel (G4 only)
2 — 50K Rads (Si)
3 — 300K Rads (Si) (N-Channel)
4 — 600K Rads (Si) (N-Channel)
7 — 100K Rads (Si) (N-Channel)
8 — 1000K Rads (Si) (N-Channel)
9 — 100K Rads (Si) (P-Channel) G4
97 — 100K Rads (Si) (P-Channel) R5
93 — 300K Rads (Si) (P-Channel) R5

VOLTAGE

Z — 30 Volts
0 — 60 Volts
1 — 100 Volts (or 130 or 150 with Voltage Adder)
2 — 200 Volts (or 250 with Voltage Adder)
3 — 400 Volts
4 — 500 Volts
C — 600 Volts
G — 1000 Volts

LEAD OPTION

A — Lead Form Down*
B — Lead Form Up**
C — Lead Trimmed
D — On Carrier

(Option D applies only to SMD-1 & SMD-2)

* Lead attach if package is an SMD

** Lead attach & formed if package is SMD

SCREENING LEVEL

SCX — TX Level
SCV — TXV Level
SCS — Space Level

PROCESS INDICATOR

SE — Single Event Effect

PIN OUT DESIGNATOR

(Applies only to TO-257AA package)

Blank:	M:
1 = Gate	1 = Drain
2 = Drain	2 = Source
3 = Source	3 = Gate

EYELET DESIGNATOR

(Applies only to TO-257AA package)

Blank — Glass
C — Ceramic

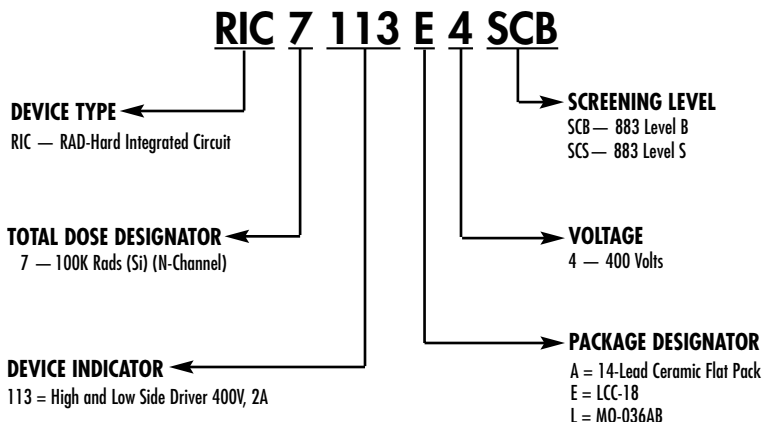
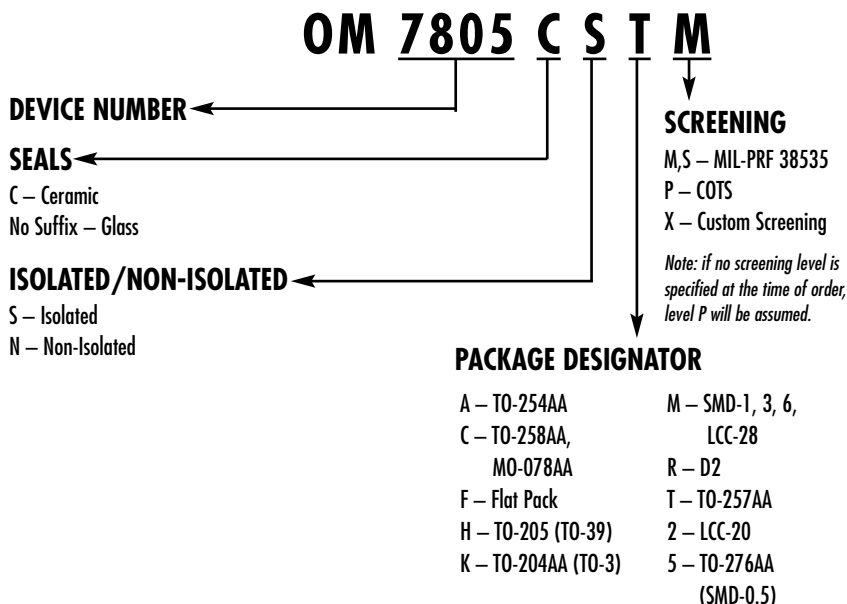
VOLTAGE ADDER

(Does not apply to 60V devices)

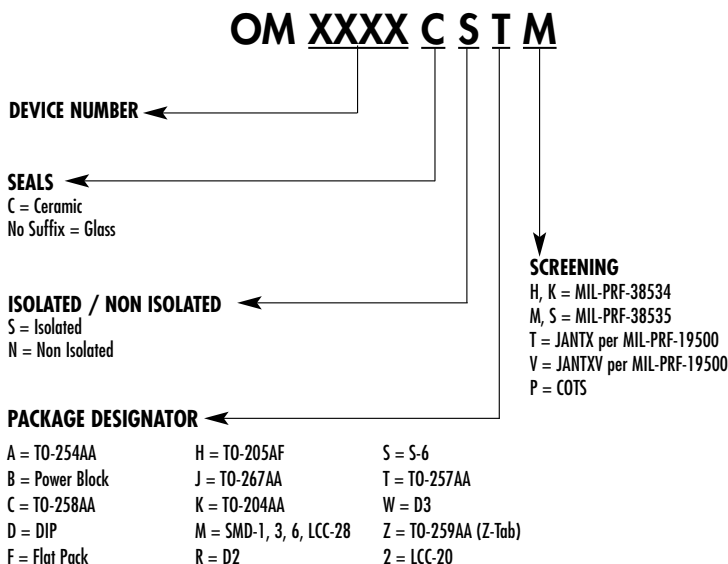
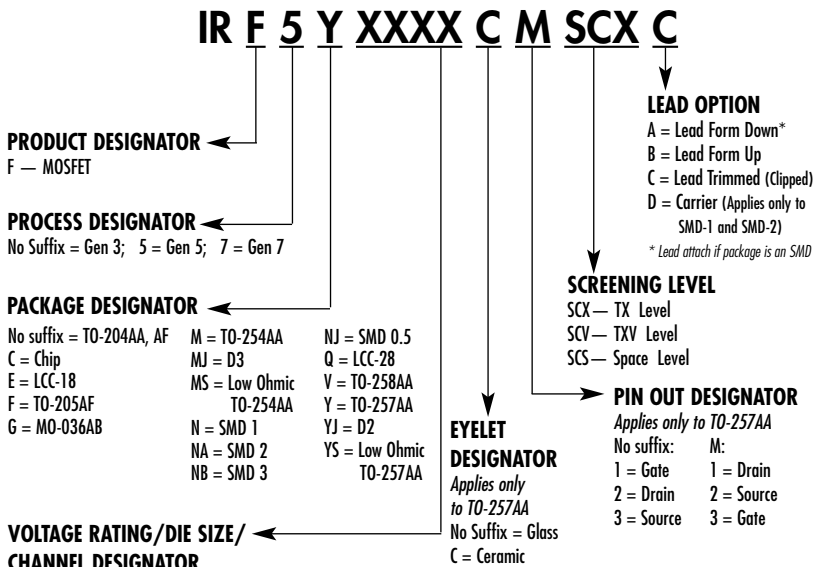
3 — 30V
4 — 50V

DIE SIZE

Z — Smallest Area
1 — Die size 1
2 — Die size 2
3 — Die size 3
4 — Die size 4
5 — Die size 5
6 — Die size 6 Largest Area

RAD-Hard Control Integrated Circuits**Linear Voltage Regulators**

Standard MOSFETs



Introduction

International
IOR Rectifier

Discrete QPL Products

JAN TX R 2N XXXX U

JOINT ARMY NAVY ←

SCREENING LEVEL ←

TX
TXV → IAW MIL-PRF-19500
S

RADIATION LEVEL ←

(Applies only to RAD-Hard)
Blank = Non RAD-Hard
L = 50K Rads
R = 100K Rads
F = 300K Rads
G = 600K Rads
H = 1000K Rads

PACKAGE DESIGNATOR

T1 = TO-254AA U1 = SMD-1
T2 = TO-205AF U2 = SMD-2
T3 = TO-257AA U3 = SMD-0.5
T4 = TO-3 U5 = LCC 18

JEDEC ASSIGNED NUMBER ←

DEVICE TECHNOLOGY

1N — Diode
2N — Transistor

UltraFast Rectifiers

HF A 30 HB 60 C C SCX C

FRED ←

PROCESS DESIGNATOR ←

A — Electron Irradiated
B — Platinum Diffused

AVERAGE CURRENT ←

PACKAGE DESIGNATOR ←

HB — TO-254AA
HC — TO-258AA
HI — TO-259AA
HF — SMD-1
HJ — SMD-0.5
HY — TO-257AA

VOLTAGE RATING ←

20 — 200V
40 — 400V
60 — 600V
120 — 1200V

LEAD OPTION

A — Lead Form Down*
B — Lead Form Up
C — Lead Trimmed (clipped)
D — Carrier (Applies only to SMD-1 and SMD-2)

* Lead attach if package is an SMD

SCREENING LEVEL

SCX — TX Level
SCV — TXV Level
SCS — Space Level

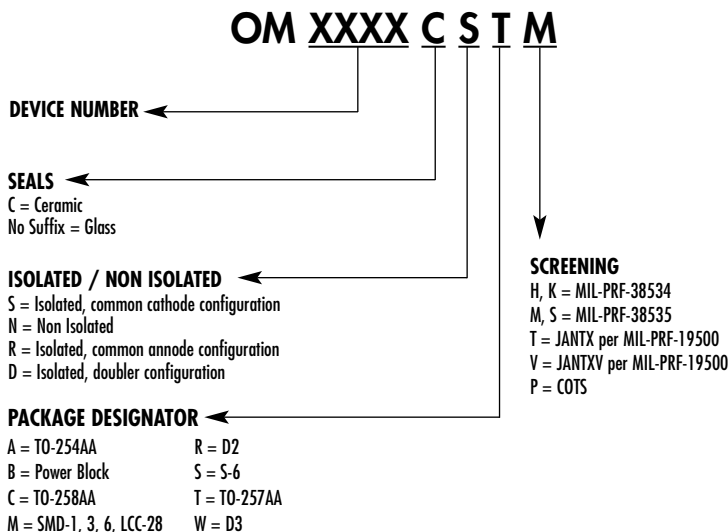
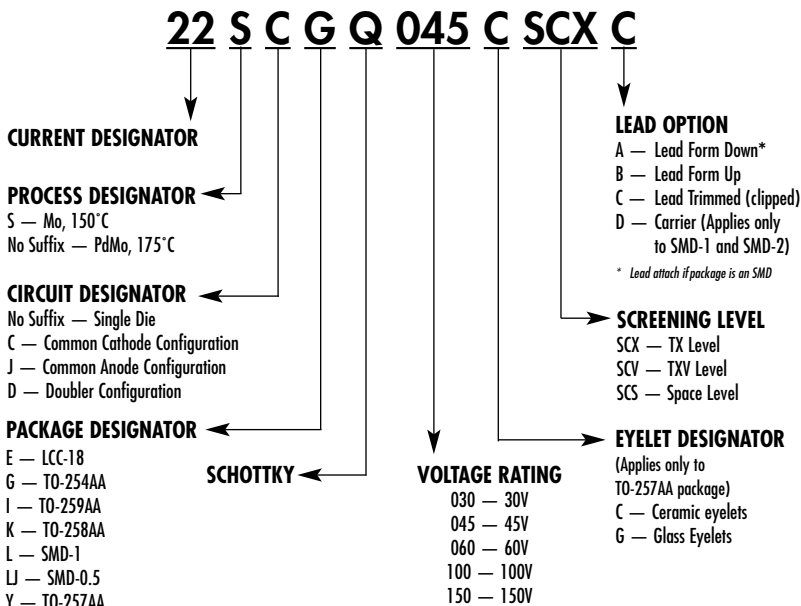
CIRCUIT DESIGNATOR

No Suffix — Single Die
C — Common Cathode Configuration
J — Common Anode Configuration
D — Doubler Configuration

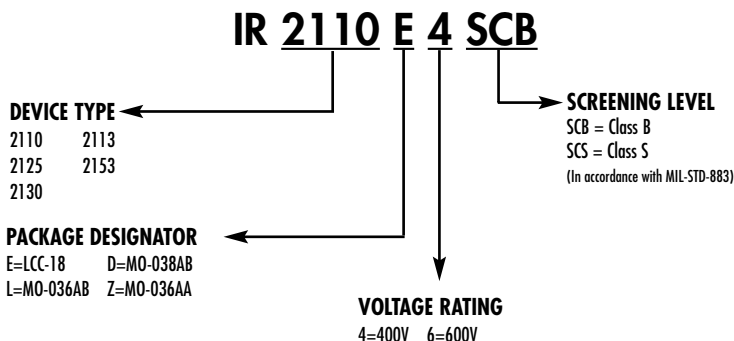
EYELET DESIGNATOR

(Applies only to TO-257AA package)
C — Ceramic Eyelets
G — Glass Eyelets

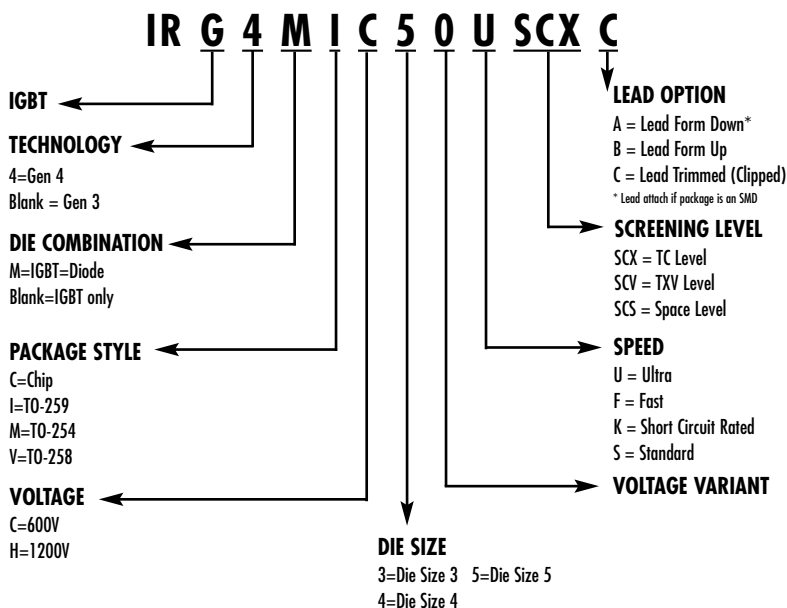
Schottkys



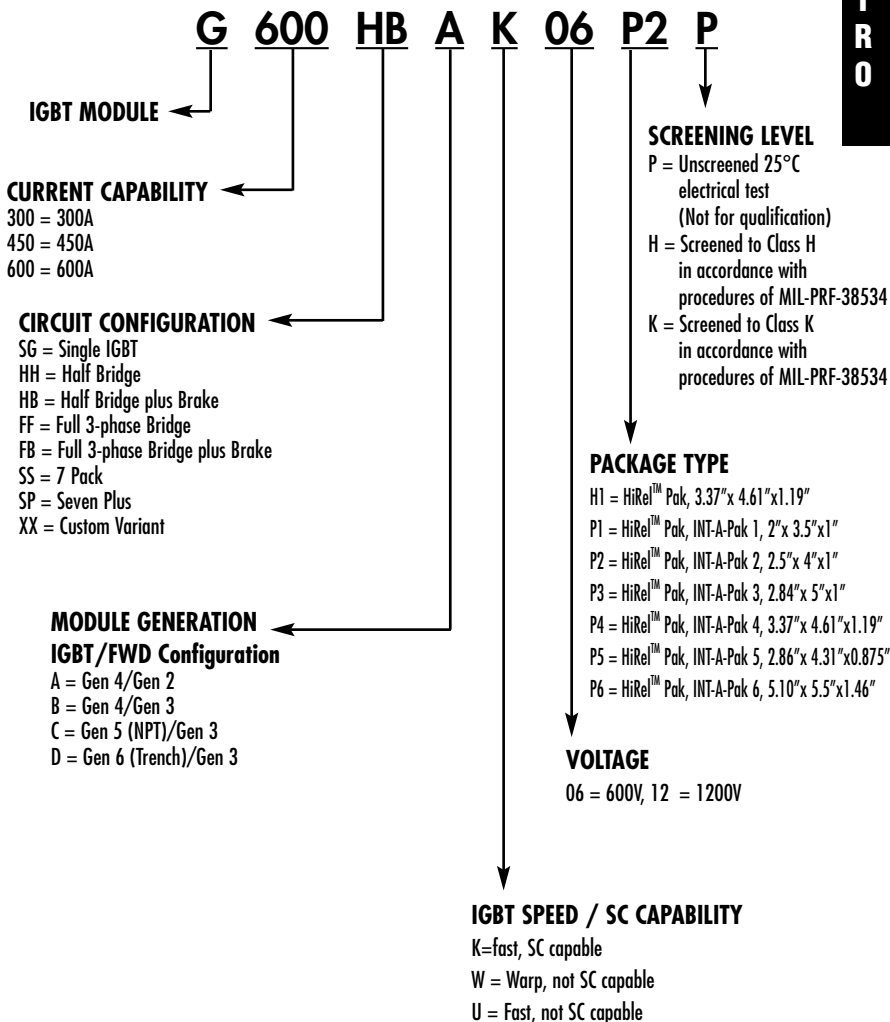
Integrated Circuits

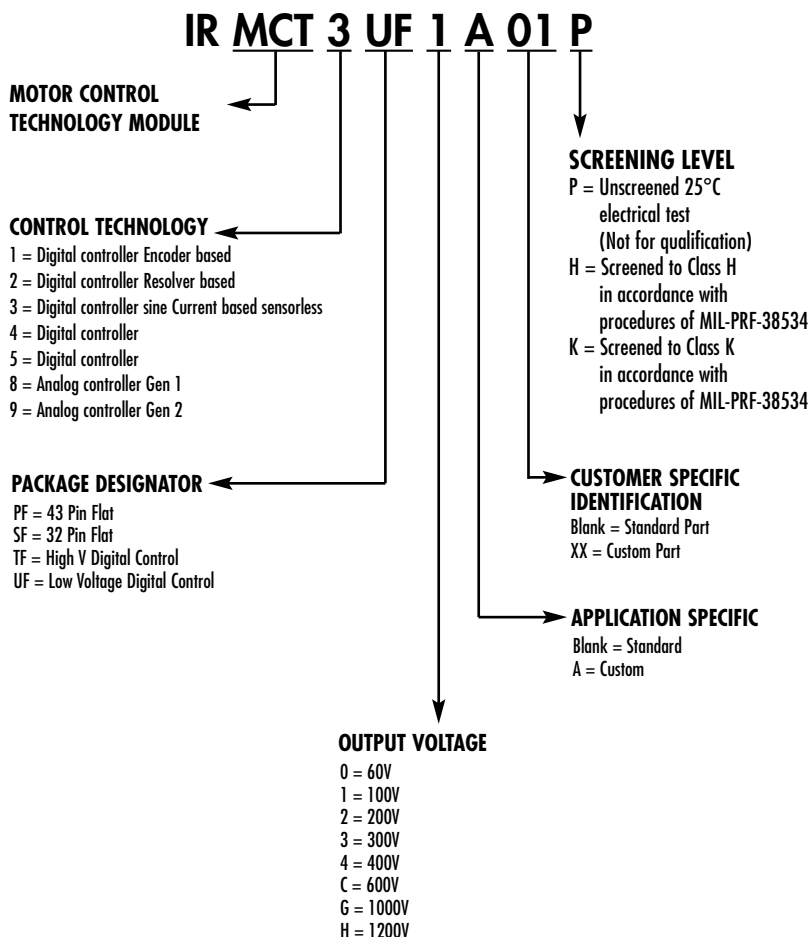


IGBTs

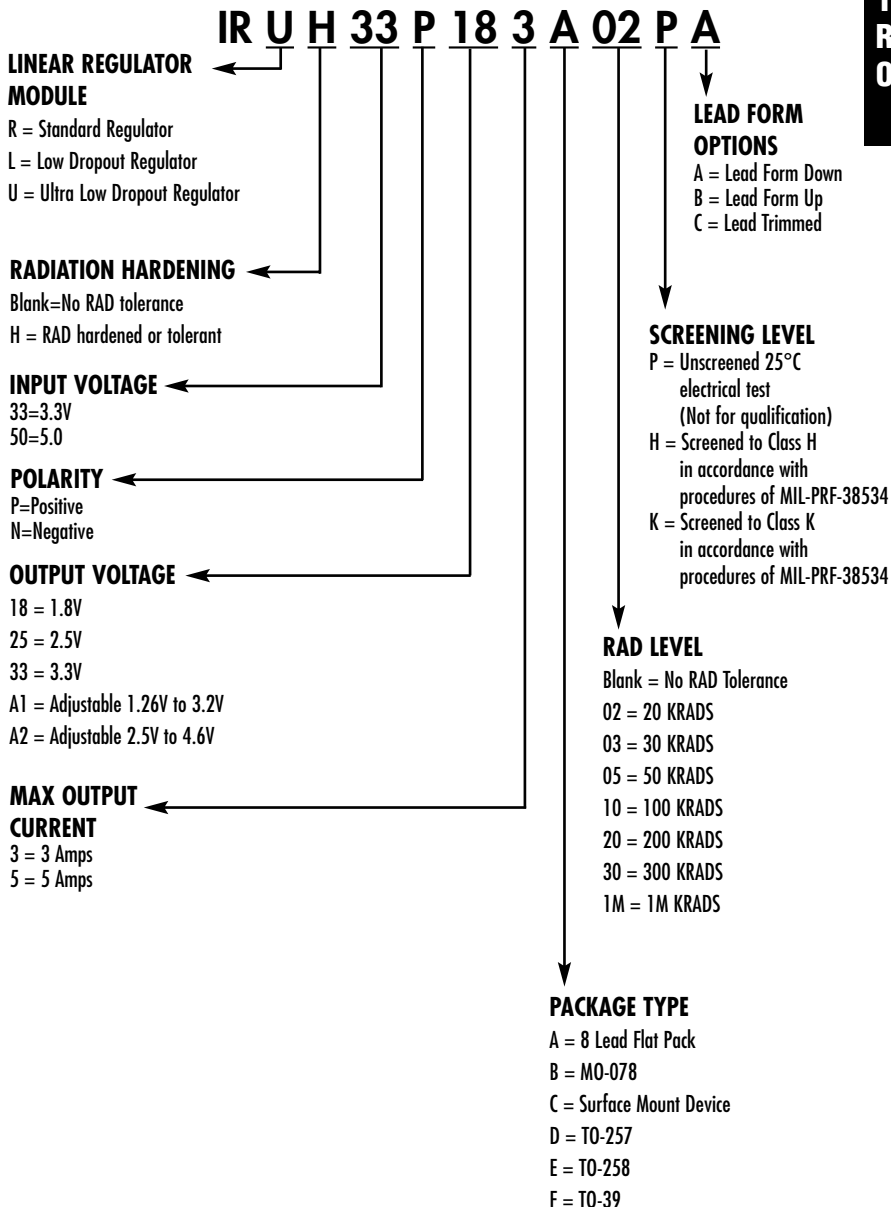


IGBT Modules



Motor Controllers

RAD-Hard ULDO Hybrid Linear Voltage Regulators



Solid State Relays

RD H A 7 10 NM 06 A 8 S K

DEVICE TYPE

RD = DC Solid State Relay
RA = AC Solid State Relay
UD = DC Solid State Power Controller
UA = AC Solid State Power Controller

RADIATION CHARACTERIZATION

H = RAD-Hard
F = Non RAD-Hard

GENERATION

H = Current Design
B = Future Design

RADIATION LEVEL

Blank = Non RAD-Hard
3 = 300 KRAD (Si)
4 = 600 KRAD (Si)
7 = 100 KRAD (Si)
8 = 1000 KRAD (Si)

CURRENT

01= 1A
03= 3A
10= 10A
20= 20A

PACKAGE

SE= 8-Pin Surface Mount
FE= 8-Pin Flange Mount
SD= 12-Pin Surface Mount
FD= 12-Pin Flange Mount
SF= 5-Pin Surface Mount
FF= 5-Pin Flange Mount
NM= SMD-4
FP= 64-Pin Flat Pack
FT= 20-Pin Flat Pack

SCREENING LEVEL

P = Unscreened 25°C electrical test (Not for qualification)
H = Screened to Class H in accordance with procedures of MIL-PRF-38534
K = Screened to Class K in accordance with procedures of MIL-PRF-38534

FEATURES

S= 3.3V Buffered, Controlled
F= 3.3V Buffered Fast
N= Non Buffered Fast
P= Non Buffered, Controlled
Q= 5 Volt Buffer, Controlled
C= Non Buffered, Intermediate (Compromise)
B= Break Before Make
M= Make Before Break
U= Unsequenced

NUMBER OF POLES

1= Single Pole
2= Double Pole
8= 8 Poles

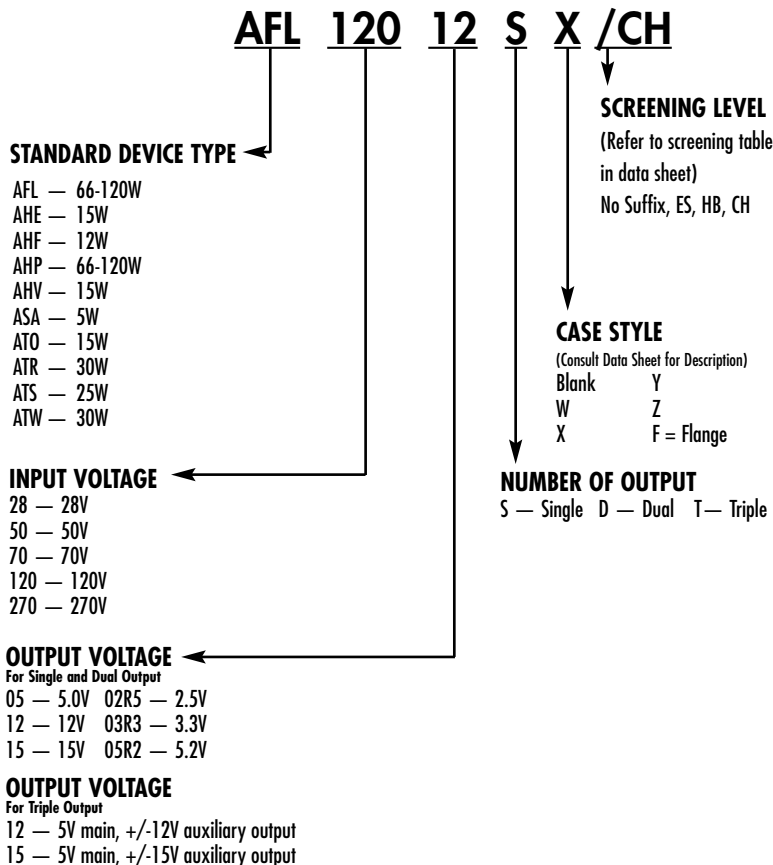
THROW CONFIGURATION

A= Single Throw, Normally Open
B= Single Throw, Normally Closed
C= Double Throw
M= Mixed

VOLTAGE

03=30 Volts 40=400 Volts
06=60 Volts 50=500 Volts
10=100 Volts 60=600 Volts
20=200 Volts 1K=1000 Volts

Military DC-DC Converters



RAD-Hard/RAD-Tolerant DC-DC Converters

ARH 28 03R3 05 S /EM

SPACE DEVICE TYPE

AMR — Rad Tolerant
AMA — Rad Tolerant
AMF — Rad Tolerant
ARH — Rad Hard
ART — Rad Hard
LS — Rad Hard
M3G — Rad Hard
M3L — Rad Tolerant
M3H — Rad Tolerant
S — Rad Hard
Z — Rad Hard

INPUT VOLTAGE

28 — 28V
50 — 50V
70 — 70V
120 — 120V
270 — 270V

SCREENING LEVEL

(Refer to screening table
in data sheet)

EM, CK, No Suffix

NUMBER OF OUTPUT

S — Single
D — Dual
T — Triple

OUTPUT VOLTAGE

For Triple Output (except ART)

05 — +/-5V auxiliary output

15 — +/-15V auxiliary output

OUTPUT VOLTAGE

for Single, Dual and Main Output of Triple

05 — 5.0V 01R5 — 1.5V

12 — 12V 02R5 — 2.5V

15 — 15V 03R3 — 3.3V

05R2 — 5.2V

OUTPUT VOLTAGE

For ART Series

12 — 5V main, +/-12V auxiliary output

15 — 5V main, +/-15V auxiliary output

International Rectifier currently does not have a DSCC approved RAD-Hard assurance program.

PRICING

Prices are quoted F.O.B. seller's shipping point.

Prices are in U.S. dollars and are subject to change without notice.

TERMS

Terms are NET 30 days upon receipt of invoice.

MINIMUM ORDER

The minimum order value for DC/DC Converters & EMI Filters is \$250 for parts in inventory, otherwise \$1000.

The minimum order value is \$500 per order and \$250 per line item for all unscreened discrete devices and JANTX/JANTXV Non-RAD-Hard devices.

For all other products, the minimum order value is \$500 per order and \$250 per line item.

ORDER PLACEMENT

Please contact your local sales representative or the specific facilities listed below:



Leominster Facility

205 Crawford Street

Leominster, MA 01453

Phone: +1 978 534 5776

Fax: +1 978 537 4246

E-mail: hirel_sales@irf.com

Santa Clara Facility

2270 Martin Ave

Santa Clara, CA 95050

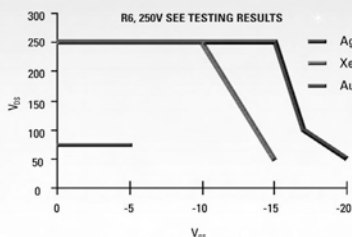
Phone: +1 408 727 2121

Fax: +1 408 988 2702

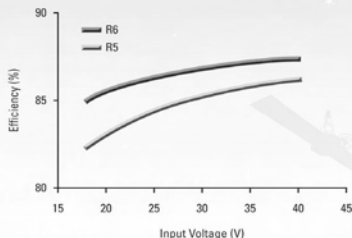
E-mail: hirel_sales@irf.com

AT 22,241 MILES UP, WHY TAKE THE RISK?

R6 Space Level MOSFETs. Extremely Rugged. Highly Efficient.



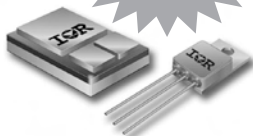
RAD-HARD™



EFFICIENT

**ITAR
FREE**

Part Number	Voltage(V)	$R_{DS(on)}$ ()	Package Style
IRHMS67160	100	0.011	Low Ohmic TO-254
IRHNJ67130	100	0.042	SMD-0.5
IRHYS67130CM	100	0.042	Low Ohmic TO-257
IRHNA67160	100	0.01	SMD-2
IRHNA67164	150	0.018	SMD-2
IRHMS67164	150	0.019	Low Ohmic TO-254
IRHNJ67134	150	0.088	SMD-0.5
IRHMS67260	200	0.029	Low Ohmic TO-254
IRHNA67260	200	0.028	SMD-2
IRHNJ67230	200	0.13	SMD-0.5
IRHYS67230CM	200	0.13	Low Ohmic TO-257
IRHMS67264	250	0.041	Low Ohmic TO-254
IRHNA67264	250	0.04	SMD-2



FEATURES

- Increases system efficiency by 2.5%*
- Reduces MOSFET power loss by 30%*
- Decreases in $R_{DS(on)}$ up to 40%*
- SEE Immunity to LET of 90MeV
- TID Ratings at 100 and 300Krad (Si)
- Low-ohmic and tab-less packages available

*compared to existing technology

RAD-Hard is a trademark of International Rectifier.

for more information call 1.800.919.7898 or visit us at
www.irf.com/hirel

International
IR Rectifier
THE POWER MANAGEMENT LEADER

LOOK TO THE LEADER FOR RAD-HARD LOGIC LEVEL POWER MOSFETS

Simplify Your Power Circuit Design for Harsh Environments

**INDUSTRY'S
FIRST**

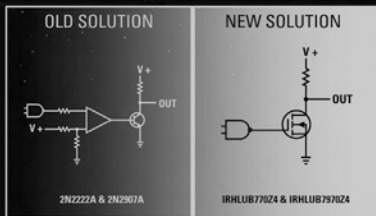


Simplify your design. Reduce your parts count. Lower your conduction losses. Boost your switching speed. IR's industry-first radiation-hardened, logic level power MOSFETs deliver the superior alternative to 2N2222A and 2N2907A bipolar transistors.

IR Advantage

- Fewer parts
- Faster switching*
 - Turn on up to 4X faster
 - Turn off up to 9X faster
- Lower power losses*
 - 1.8mW vs 40mW (N channel)
 - 2.7mW vs 40mW (P Channel)
- 5V CMOS and TTL compatible gate drive
- Radiation-hardened to 300Krad (Si) TID
- COTS and MIL-PRF-19500 versions

PART #	BV _{DSS}	POLARITY	V _{GS(th)}	R _{DS(on)}
IRHLUB77024	60V	N-Channel	1.0 to 2.0V	0.55 Ω
IRHLUB79024	-60V	P-Channel	-1.0 to -2.0V	1.2 Ω



Launch your next design with industry-leading MOSFETs from International Rectifier. Contact your local sales representative or go to irf.com for spice models and applications notes.

**compared to equivalent bipolar transistors*

RAD-Hard™ is a trademark of International Rectifier Corporation.

for more information call 1.800.919.7898 or visit us at
www.irf.com/hirel

International
IR Rectifier
THE POWER MANAGEMENT LEADER

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
-------------	--	---	--	--	---------------------------------	---	---------

Total Ionizing Dose Hardened

Quad N-Channel

IRHQ57110	100	0.27	4.6	2.9	100	12	28-pin LCC
IRHQ53110	100	0.27	4.6	2.9	300	12	28-pin LCC
IRHQ54110	100	0.27	4.6	2.9	500	12	28-pin LCC
IRHQ58110	100	0.27	4.6	2.9	1000	12	28-pin LCC
IRHG57110	100	0.29	1.6	1	100	1.4	MO-036AB
IRHG53110	100	0.29	1.6	1	300	1.4	MO-036AB
IRHG54110	100	0.29	1.6	1	500	1.4	MO-036AB
IRHG58110	100	0.29	1.6	1	1000	1.4	MO-036AB
IRHQ7110	100	0.6	3	1.9	100	12	28-pin LCC
IRHG7110	100	0.6	1	0.6	100	1.4	MO-036AB
IRHQ3110	100	0.6	3	1.9	300	12	28-pin LCC
IRHG3110	100	0.6	1	0.6	300	1.4	MO-036AB
IRHQ4110	100	0.6	3	1.9	500	12	28-pin LCC
IRHG4110	100	0.6	1	0.6	500	1.4	MO-036AB
IRHG8110	100	0.6	1	0.6	1000	1.4	MO-036AB
IRHQ8110	100	0.6	3	1.9	1000	12	28-pin LCC

IRHG7214	250	2.25	0.5	0.3	100	1.4	MO-036AB
IRHQ7214	250	2.25	1.6	1	100	12	28-pin LCC
IRHQ3214	250	2.25	1.6	1	300	12	28-pin LCC
IRHG3214	250	2.25	0.5	0.3	300	1.4	MO-036AB
IRHQ4214	250	2.25	1.6	1	500	12	28-pin LCC
IRHG4214	250	2.25	0.5	0.3	500	1.4	MO-036AB
IRHQ8214	250	2.25	1.6	1	1000	12	28-pin LCC
IRHG8214	250	2.25	0.5	0.3	1000	1.4	MO-036AB

Quad P-Channel

IRHG597110	-100	0.96	-0.96	-0.6	100	1.4	MO-036AB
IRHQ593110	-100	0.96	-0.96	-0.6	300	1.4	MO-036AB
IRHQ9110	-100	1.1	-2.3	-1.5	100	12	28-pin LCC
IRHG9110	-100	1.1	-0.75	-0.5	100	1.4	MO-036AB
IRHQ93110	-100	1.1	-2.3	-1.5	300	12	28-pin LCC
IRHG93110	-100	1.1	-0.75	-0.5	300	1.4	MO-036AB
IRHQ597110	-100	1.2	-2.8	-1.8	100	12	28-pin LCC
IRHQ593110	-100	1.2	-2.8	-1.8	300	12	28-pin LCC

All specifications @ 25°C unless noted

N/A = Not Applicable

Power MOSFETs

International
IR Rectifier

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
-------------	--	---	--	--	---------------------------------	---	---------

Total Ionizing Dose Hardened

2 N- & 2 P-Channel

M
O
S
F
E
T
S

IRHQ567110(N)	100	0.27	4.6	2.9	100	12	28-pin LCC
IRHQ567110(P)	-100	0.96	-2.8	-1.8	100	12	28-pin LCC
IRHQ563110(N)	100	0.27	4.6	2.9	300	12	28-pin LCC
IRHQ563110(P)	-100	0.96	-2.8	-1.8	300	12	28-pin LCC
IRHG567110(N)	100	0.29	0.29	1	100	1.4	MO-036AB
IRHG567110(P)	-100	0.96	-0.96	-0.6	100	1.4	MO-036AB
IRHG563110(N)	100	0.29	0.29	1	300	1.4	MO-036AB
IRHG563110(P)	-100	0.96	-0.96	-0.6	300	1.4	MO-036AB
IRHQ6110(N)	100	0.38	3	1.9	100	12	28-pin LCC
IRHQ6110(P)	-100	0.88	-2.2	-1.4	100	12	28-pin LCC
IRHQ63110(N)	100	0.38	3	1.9	300	12	28-pin LCC
IRHQ63110(P)	-100	0.88	-2.2	-1.4	300	12	28-pin LCC
IRHG6110(N)	100	0.7	1	0.6	100	1.4	MO-036AB
IRHG6110(P)	-100	1.4	-0.75	-0.5	100	1.4	MO-036AB
IRHG63110(N)	100	0.7	1	0.6	300	1.4	MO-036AB
IRHG63110(P)	-100	1.4	-0.75	-0.5	300	1.4	MO-036AB

Single N-Channel

IRHNA57Z60	30	0.0035	75	75	100	300	SMD-2
JANSR2N7467U2	30	0.0035	75	75	100	300	SMD-2
IRHNA53Z60	30	0.0035	75	75	300	300	SMD-2
JANSF2N7467U2	30	0.0035	75	75	300	300	SMD-2
JANSNG2N7467U2	30	0.0035	75	75	500	300	SMD-2
IRHNA54Z60	30	0.0035	75	75	500	300	SMD-2
JANSN2N7467U2	30	0.0035	75	75	1000	300	SMD-2
IRHNA58Z60	30	0.0035	75	75	1000	300	SMD-2
JANSR2N7478T1	30	0.0045	45	45	100	208	TO-254AA LO
IRHMS57Z60	30	0.0045	45	45	100	208	TO-254AA LO
IRHMB57Z60	30	0.0045	45	45	100	208	TO-254AA LO
IRHMB53Z60	30	0.0045	45	45	300	208	TO-254AA LO
IRHMB54Z60	30	0.0045	45	45	500	208	TO-254AA LO
JANSN2N7478T1	30	0.0045	45	45	1000	208	TO-254AA LO
IRHMB58Z60	30	0.0045	45	45	1000	208	TO-254AA LO
IRHMS58Z60	30	0.0045	45	45	1000	208	TO-254AA LO
IRHNA7Z60	30	0.009	75	75	100	300	SMD-2
IRHNB7Z60	30	0.009	75	75	100	300	SMD-3
IRHNB3Z60	30	0.009	75	75	300	300	SMD-3
IRHNA3Z60	30	0.009	75	75	300	300	SMD-2
IRHNA4Z60	30	0.009	75	75	500	300	SMD-2
IRHNB4Z60	30	0.009	75	75	500	300	SMD-3
IRHNA8Z60	30	0.009	75	75	1000	300	SMD-2
IRHNB8Z60	30	0.009	75	75	1000	300	SMD-3

N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

For data sheets visit our Web site
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Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

IRHM57Z60	30	0.0095	35	35	100	250	TO-254AA
IRHM53Z60	30	0.0095	35	35	300	250	TO-254AA
IRHM54Z60	30	0.0095	35	35	500	250	TO-254AA
IRHM58Z60	30	0.0095	35	35	1000	250	TO-254AA
IRHM7Z60	30	0.014	35	35	100	250	TO-254AA
IRHM3Z60	30	0.014	35	35	300	250	TO-254AA
IRHM4Z60	30	0.014	35	35	500	250	TO-254AA
IRHM8Z60	30	0.014	35	35	1000	250	TO-254AA
JANSR2N7479U3	30	0.02	22	22	100	75	SMD-0.5
IRHNJ57Z30	30	0.02	22	22	100	75	SMD-0.5
IRHNJ53Z30	30	0.02	22	22	300	75	SMD-0.5
JANSF2N7479U3	30	0.02	22	22	300	75	SMD-0.5
JANSR2N7479U3	30	0.02	22	22	500	75	SMD-0.5
IRHNJ54Z30	30	0.02	22	22	500	75	SMD-0.5
JANSH2N7479U3	30	0.02	22	22	1000	75	SMD-0.5
IRHNJ58Z30	30	0.02	22	22	1000	75	SMD-0.5
IRHY57Z30CM	30	0.03	18	18	100	75	TO-257AA
JANSR2N7482T3	30	0.03	18	18	100	75	TO-257AA
IRHY53Z30CM	30	0.03	18	18	300	75	TO-257AA
JANSF2N7482T3	30	0.03	18	18	300	75	TO-257AA
IRHY54Z30CM	30	0.03	18	18	500	75	TO-257AA
JANSR2N7482T3	30	0.03	18	18	500	75	TO-257AA
JANSH2N7482T3	30	0.03	18	18	1000	75	TO-257AA
IRHY58Z30CM	30	0.03	18	18	1000	75	TO-257AA
JANSR2N7491T2	30	0.045	12	10	100	25	TO-205AF
IRHF57Z30	30	0.045	12	10	100	25	TO-205AF
IRHF53Z30	30	0.045	12	10	300	25	TO-205AF
JANSF2N7491T2	30	0.045	12	10	300	25	TO-205AF
IRHF54Z30	30	0.045	12	10	500	25	TO-205AF
JANSR2N7491T2	30	0.045	12	10	500	25	TO-205AF
IRHF58Z30	30	0.045	12	10	1000	25	TO-205AF
JANSH2N7491T2	30	0.045	12	10	1000	25	TO-205AF
IRHE57Z30	30	0.07	12	8	100	25	18-pin LCC
JANSR2N7494U5	30	0.07	12	8	100	25	18-pin LCC
IRHE53Z30	30	0.07	12	8	300	25	18-pin LCC
JANSF2N7494U5	30	0.07	12	8	300	25	18-pin LCC
IRHE54Z30	30	0.07	12	8	500	25	18-pin LCC
JANSR2N7494U5	30	0.07	12	8	500	25	18-pin LCC
IRHE58Z30	30	0.07	12	8	1000	25	18-pin LCC
JANSH2N7494U5	30	0.07	12	8	1000	25	18-pin LCC

JANSR2N7468U2	60	0.0056	75	75	100	300	SMD-2
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Power MOSFETs

International
IR Rectifier

Part Number	Max Breakdown Voltage Drain to Source V_{DS} (V)	Resistance Drain to Source $R_{DS(on)}$ (Ω)	Max Continuous Drain Current I_D (A)	Max Continuous Drain Current $I_D @ 100^\circ\text{C}$ (A)	Radiation Level krad (Si)	Max Power Dissipation P_D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

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IRHNA57064	60	0.0056	75	75	100	300	SMD-2
IRHNA53064	60	0.0056	75	75	300	300	SMD-2
JANSF2N7468U2	60	0.0056	75	75	300	300	SMD-2
IRHNA54064	60	0.0056	75	75	500	300	SMD-2
JANS2N7468U2	60	0.0056	75	75	500	300	SMD-2
JANS2N7468U2	60	0.0056	75	75	1000	300	SMD-2
IRHNA58064	60	0.0056	75	75	1000	300	SMD-2
JANSR2N7470T1	60	0.006	45	45	100	208	TO-254AA LO
IRHMS7064	60	0.006	45	45	100	208	TO-254AA LO
IRHMB57064	60	0.006	45	45	100	208	TO-254AA LO
IRHMB53064	60	0.006	45	45	300	208	TO-254AA LO
JANSF2N7470T1	60	0.006	45	45	300	208	TO-254AA LO
IRHMS53064	60	0.006	45	45	300	208	TO-254AA LO
IRHMS54064	60	0.006	45	45	500	208	TO-254AA LO
IRHMB54064	60	0.006	45	45	500	208	TO-254AA LO
JANS2N7470T1	60	0.006	45	45	500	208	TO-254AA LO
IRHMB58064	60	0.006	45	45	1000	208	TO-254AA LO
IRHMS58064	60	0.006	45	45	1000	208	TO-254AA LO
JANS2N7470T1	60	0.006	45	45	1000	208	TO-254AA LO
IRHM57064	60	0.012	35	35	100	250	TO-254AA
IRHM53064	60	0.012	35	35	300	250	TO-254AA
IRHM54064	60	0.012	35	35	500	250	TO-254AA
IRHM58064	60	0.012	35	35	1000	250	TO-254AA
IRHNA7064	60	0.015	75	56	100	300	SMD-2
JANSR2N7431U	60	0.015	75	56	100	300	SMD-2
IRHNB7064	60	0.015	75	56	100	300	SMD-3
JANSF2N7431U	60	0.015	75	56	300	300	SMD-2
IRHNB3064	60	0.015	75	56	300	300	SMD-3
IRHNA3064	60	0.015	75	56	300	300	SMD-2
IRHNB4064	60	0.015	75	56	500	300	SMD-3
JANS2N7431U	60	0.015	75	56	500	300	SMD-2
IRHNA4064	60	0.015	75	56	500	300	SMD-2
IRHNB8064	60	0.015	75	56	1000	300	SMD-3
IRHNA8064	60	0.015	75	56	1000	300	SMD-2
JANS2N7431U	60	0.015	75	56	1000	300	SMD-2
IRHM7064	60	0.021	35	35	100	250	TO-254AA
JANSR2N7431	60	0.021	35	35	100	250	TO-254AA
JANSF2N7431	60	0.021	35	35	300	250	TO-254AA
IRHM3064	60	0.021	35	35	300	250	TO-254AA
IRHM4064	60	0.021	35	35	500	250	TO-254AA
JANS2N7431	60	0.021	35	35	500	250	TO-254AA
IRHM8064	60	0.021	35	35	1000	250	TO-254AA
JANS2N7431	60	0.021	35	35	1000	250	TO-254AA

N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

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Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

IRH7054	60	0.025	45	32	100	150	TO-204AE
IRH3054	60	0.025	45	32	300	150	TO-204AE
IRH4054	60	0.025	45	32	500	150	TO-204AE
IRH8054	60	0.025	45	32	1000	150	TO-204AE
IRHN7054	60	0.027	35	30	100	150	SMD-1
JANSR2N7394	60	0.027	35	30	100	150	TO-254AA
JANSR2N7394U	60	0.027	35	30	100	150	SMD-1
IRHM7054	60	0.027	35	30	100	150	TO-254AA
IRHM3054	60	0.027	35	30	300	150	TO-254AA
JANSF2N7394U	60	0.027	35	30	300	150	SMD-1
JANSF2N7394	60	0.027	35	30	300	150	TO-254AA
IRHN3054	60	0.027	35	30	300	150	SMD-1
IRHN4054	60	0.027	35	30	500	150	SMD-1
IRHM4054	60	0.027	35	30	500	150	TO-254AA
JANSG2N7394	60	0.027	35	30	500	150	TO-254AA
JANSG2N7394U	60	0.027	35	30	500	150	SMD-1
JANSH2N7394U	60	0.027	35	30	1000	150	SMD-1
IRHN8054	60	0.027	35	30	1000	150	SMD-1
IRHM8054	60	0.027	35	30	1000	150	TO-254AA
JANSH2N7394	60	0.027	35	30	1000	150	TO-254AA
JANSR2N7480U3	60	0.03	22	21	100	75	SMD-0.5
IRHNJ57034	60	0.03	22	21	100	75	SMD-0.5
JANSF2N7480U3	60	0.03	22	21	300	75	SMD-0.5
IRHNJ53034	60	0.03	22	21	300	75	SMD-0.5
JANSF2N7480U3	60	0.03	22	21	500	75	SMD-0.5
IRHNJ54034	60	0.03	22	21	500	75	SMD-0.5
JANSH2N7480U3	60	0.03	22	21	1000	75	SMD-0.5
IRHNJ58034	60	0.03	22	21	1000	75	SMD-0.5
IRHY57034CM	60	0.04	18	18	100	75	TO-257AA
JANSR2N7483T3	60	0.04	18	18	100	75	TO-257AA
IRHY53034CM	60	0.04	18	18	300	75	TO-257AA
JANSF2N7483T3	60	0.04	18	18	300	75	TO-257AA
JANSF2N7483T3	60	0.04	18	18	500	75	TO-257AA
IRHY54034CM	60	0.04	18	18	500	75	TO-257AA
IRHY58034CM	60	0.04	18	18	1000	75	TO-257AA
JANSH2N7483T3	60	0.04	18	18	1000	75	TO-257AA
IRHF57034	60	0.048	12	10	100	25	TO-205AF
JANSR2N7492T2	60	0.048	12	10	100	25	TO-205AF
JANSF2N7492T2	60	0.048	12	10	300	25	TO-205AF
IRHF53034	60	0.048	12	10	300	25	TO-205AF
JANSF2N7492T2	60	0.048	12	10	500	25	TO-205AF
IRHF54034	60	0.048	12	10	500	25	TO-205AF
IRHF58034	60	0.048	12	10	1000	25	TO-205AF

All specifications @ 25°C unless noted

N/A = Not Applicable

Power MOSFETs

International
IR Rectifier

Part Number	Max Breakdown Voltage Drain to Source B _{VDS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

JANSH2N7492T2	60	0.048	12	10	1000	25	TO-205AF
JANSR2N7495U5	60	0.08	12	7.4	100	25	18-pin LCC
IRHE57034	60	0.08	12	7.4	100	25	18-pin LCC
JANSF2N7495U5	60	0.08	12	7.4	300	25	18-pin LCC
IRHE53034	60	0.08	12	7.4	300	25	18-pin LCC
IRHE54034	60	0.08	12	7.4	500	25	18-pin LCC
JANS2N7495U5	60	0.08	12	7.4	500	25	18-pin LCC
JANSH2N7495U5	60	0.08	12	7.4	1000	25	18-pin LCC
IRHE58034	60	0.08	12	7.4	1000	25	18-pin LCC
IRHLF770Z4	60	0.5	1.6	1	100	5	TO-205AF
IRHLF730Z4	60	0.5	1.6	1	300	5	TO-205AF
IRHLUB770Z4	60	0.55	0.8	0.5	100	0.6	UB
IRHLUB730Z4	60	0.55	0.8	0.5	300	0.6	UB

IRHNA67160	100	0.01	56	56	100	250	SMD-2
IRHNA63160	100	0.01	56	56	300	250	SMD-2
IRHMS67160	100	0.011	45	45	100	208	TO-254AA LO
IRHMS63160	100	0.011	45	45	300	208	TO-254AA LO
IRHNA57160	100	0.012	75	69	100	300	SMD-2
JANSR2N7469U2	100	0.012	75	69	100	300	SMD-2
JANSF2N7469U2	100	0.012	75	69	300	300	SMD-2
IRHNA53160	100	0.012	75	69	300	300	SMD-2
JANS2N7469U2	100	0.012	75	69	500	300	SMD-2
IRHNA54160	100	0.012	75	69	500	300	SMD-2
IRHNA58160	100	0.012	75	69	1000	300	SMD-2
JANSH2N7469U2	100	0.012	75	69	1000	300	SMD-2
IRHMS7160	100	0.013	45	45	100	208	TO-254AA LO
JANSR2N7471T1	100	0.013	45	45	100	208	TO-254AA LO
IRHMS53160	100	0.013	45	45	300	208	TO-254AA LO
JANSF2N7471T1	100	0.013	45	45	300	208	TO-254AA LO
IRHMS54160	100	0.013	45	45	500	208	TO-254AA LO
JANS2N7471T1	100	0.013	45	45	500	208	TO-254AA LO
IRHMS58160	100	0.013	45	45	1000	208	TO-254AA LO
JANSH2N7471T1	100	0.013	45	45	1000	208	TO-254AA LO
IRHM57160	100	0.018	35	35	100	250	TO-254AA
IRHMJ57160	100	0.018	35	35	100	250	TO-254AA
IRHM53160	100	0.018	35	35	300	250	TO-254AA
IRHMJ53160	100	0.018	35	35	300	250	TO-254AA
IRHM54160	100	0.018	35	35	500	250	TO-254AA
IRHMJ54160	100	0.018	35	35	500	250	TO-254AA
IRHMJ58160	100	0.018	35	35	1000	250	TO-254AA
IRHM58160	100	0.018	35	35	1000	250	TO-254AA

N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

For data sheets visit our Web site
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B-6

Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

JANSR2N7432U	100	0.04	51	32.5	100	300	SMD-2
IRHNB7160	100	0.04	51	32.5	100	300	SMD-3
IRHNA7160	100	0.04	51	32.5	100	300	SMD-2
IRHNA3160	100	0.04	51	32.5	300	300	SMD-2
IRHNB3160	100	0.04	51	32.5	300	300	SMD-3
JANSF2N7432U	100	0.04	51	32.5	300	300	SMD-2
IRHNB4160	100	0.04	51	32.5	500	300	SMD-3
JANSF2N7432U	100	0.04	51	32.5	500	300	SMD-2
IRHNA4160	100	0.04	51	32.5	500	300	SMD-2
IRHNA8160	100	0.04	51	32.5	1000	300	SMD-2
IRHNB8160	100	0.04	51	32.5	1000	300	SMD-3
JANSH2N7432U	100	0.04	51	32.5	1000	300	SMD-2
IRHYB67130CM	100	0.042	20	19	100	75	TO-257AA
IRHNP67130	100	0.042	22	19	100	75	SMD-0.5
IRHYB67130CM	100	0.042	20	19	100	75	TO-257AA LO
IRHNP63130	100	0.042	22	19	300	75	SMD-0.5
IRHYB63130CM	100	0.042	20	19	300	75	TO-257AA
IRHYB63130CM	100	0.042	20	19	300	75	TO-257AA LO
IRHM7160	100	0.045	35	35	100	250	TO-254AA
JANSR2N7432	100	0.045	35	35	100	250	TO-254AA
JANSF2N7432	100	0.045	35	35	300	250	TO-254AA
IRHM3160	100	0.045	35	35	300	250	TO-254AA
IRHM4160	100	0.045	35	35	500	250	TO-254AA
JANSF2N7432	100	0.045	35	35	500	250	TO-254AA
JANSH2N7432	100	0.045	35	35	1000	250	TO-254AA
IRHM8160	100	0.045	35	35	1000	250	TO-254AA
IRHN7150	100	0.065	34	21	100	150	SMD-1
JANSR2N7268	100	0.065	34	21	100	150	TO-254AA
JANSR2N7268U	100	0.065	34	21	100	150	SMD-1
IRHM7150	100	0.065	34	21	100	150	TO-254AA
IRH7150	100	0.065	34	21	100	150	TO-204AE
JANSF2N7268U	100	0.065	34	21	300	150	SMD-1
IRHN3150	100	0.065	34	21	300	150	SMD-1
JANSF2N7268	100	0.065	34	21	300	150	TO-254AA
IRH3150	100	0.065	34	21	300	150	TO-204AE
IRHM3150	100	0.065	34	21	300	150	TO-254AA
IRHN4150	100	0.065	34	21	500	150	SMD-1
JANSF2N7268	100	0.065	34	21	500	150	TO-254AA
IRHM4150	100	0.065	34	21	500	150	TO-254AA
JANSF2N7268U	100	0.065	34	21	500	150	SMD-1
IRH4150	100	0.065	34	21	500	150	TO-204AE
JANSH2N7268	100	0.065	34	21	1000	150	TO-254AA
IRHM8150	100	0.065	34	21	1000	150	TO-254AA

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

International
IR Rectifier

Part Number	Max Breakdown Voltage Drain to Source V_{DS} (V)	Resistance Drain to Source $R_{DS(on)}$ (Ω)	Max Continuous Drain Current I_D (A)	Max Continuous Drain Current I_D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P_D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

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JANSH2N7268U	100	0.065	34	21	1000	150	SMD-1
IRH8150	100	0.065	34	21	1000	150	TO-204AE
IRHN8150	100	0.065	34	21	1000	150	SMD-1
JANSR2N7481U3	100	0.075	22	16	100	75	SMD-0.5
IRHNJ57130	100	0.075	22	16	100	75	SMD-0.5
IRHNJ53130	100	0.075	22	16	300	75	SMD-0.5
JANSF2N7481U3	100	0.075	22	16	300	75	SMD-0.5
JANSR2N7481U3	100	0.075	22	16	500	75	SMD-0.5
IRHNJ54130	100	0.075	22	16	500	75	SMD-0.5
JANSH2N7481U3	100	0.075	22	16	1000	75	SMD-0.5
IRHNJ58130	100	0.075	22	16	1000	75	SMD-0.5
JANSR2N7493T2	100	0.08	11.7	7.4	100	25	TO-205AF
IRHF57130	100	0.08	11.7	7.4	100	25	TO-205AF
IRHF53130	100	0.08	11.7	7.4	300	25	TO-205AF
JANSF2N7493T2	100	0.08	11.7	7.4	300	25	TO-205AF
JANSR2N7493T2	100	0.08	11.7	7.4	500	25	TO-205AF
IRHF54130	100	0.08	11.7	7.4	500	25	TO-205AF
JANSH2N7493T2	100	0.08	11.7	7.4	1000	25	TO-205AF
IRHF58130	100	0.08	11.7	7.4	1000	25	TO-205AF
IRHY57130CM	100	0.085	18	14	100	75	TO-257AA
JANSR2N7484T3	100	0.085	18	14	100	75	TO-257AA
IRHY53130CM	100	0.085	18	14	300	75	TO-257AA
JANSF2N7484T3	100	0.085	18	14	300	75	TO-257AA
JANSR2N7484T3	100	0.085	18	14	500	75	TO-257AA
IRHY54130CM	100	0.085	18	14	500	75	TO-257AA
JANSH2N7484T3	100	0.085	18	14	1000	75	TO-257AA
IRHY58130CM	100	0.085	18	14	1000	75	TO-257AA
JANSR2N7261	100	0.18	8	5	100	25	TO-205AF
IRHN7130	100	0.18	14	9	100	75	SMD-1
JANSR2N7380	100	0.18	14.4	9.1	100	75	TO-257AA
JANSR2N7261U	100	0.18	8	5	100	25	18-pin LCC
IRH7130	100	0.18	14	9	100	75	TO-204AA
IRHF7130	100	0.18	8	5	100	25	TO-205AF
IRHE7130	100	0.18	8	5	100	25	18-pin LCC
IRHY7130CM	100	0.18	14.4	9.1	100	75	TO-257AA
IRHNJ7130	100	0.18	14.4	9.1	100	75	SMD-0.5
IRHM7130	100	0.18	14	9	100	75	TO-254AA
JANSF2N7380	100	0.18	14.4	9.1	300	75	TO-257AA
JANSF2N7261U	100	0.18	8	5	300	25	18-pin LCC
IRHN3130	100	0.18	14	9	300	75	SMD-1
JANSF2N7261	100	0.18	8	5	300	25	TO-205AF
IRHE3130	100	0.18	8	5	300	25	18-pin LCC
IRHY3130CM	100	0.18	14.4	9.1	300	75	TO-257AA

N/A = Not Applicable

All specifications @ 25°C unless noted

For data sheets visit our Web site
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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

IRHF3130	100	0.18	8	5	300	25	TO-205AF
IRHNJ3130	100	0.18	14.4	9.1	300	75	SMD-0.5
IRHM3130	100	0.18	14	9	300	75	TO-254AA
IRH3130	100	0.18	14	9	300	75	TO-204AA
JANSG2N7261U	100	0.18	8	5	500	25	18-pin LCC
IRHE4130	100	0.18	8	5	500	25	18-pin LCC
IRH4130	100	0.18	14	9	500	75	TO-204AA
IRHNJ4130	100	0.18	14.4	9.1	500	75	SMD-0.5
JANSG2N7261	100	0.18	8	5	500	25	TO-205AF
IRHF4130	100	0.18	8	5	500	25	TO-205AF
IRHM4130	100	0.18	14	9	500	75	TO-254AA
IRHY4130CM	100	0.18	14.4	9.1	500	75	TO-257AA
JANSG2N7380	100	0.18	14.4	9.1	500	75	TO-257AA
IRHN4130	100	0.18	14	9	500	75	SMD-1
IRHN8130	100	0.18	14	9	1000	75	SMD-1
IRHM8130	100	0.18	14	9	1000	75	TO-254AA
JANSH2N7261	100	0.18	8	5	1000	25	TO-205AF
IRHY8130CM	100	0.18	14.4	9.1	1000	75	TO-257AA
JANSH2N7380	100	0.18	14.4	9.1	1000	75	TO-257AA
IRHF8130	100	0.18	8	5	1000	25	TO-205AF
IRHNJ8130	100	0.18	14.4	9.1	1000	75	SMD-0.5
IRH8130	100	0.18	14	9	1000	75	TO-204AA
JANSH2N7261U	100	0.18	8	5	1000	25	18-pin LCC
IRHE8130	100	0.18	8	5	1000	25	18-pin LCC
IRHE7110	100	0.6	3.5	2.2	100	15	18-pin LCC
IRHF7110	100	0.6	3.5	2.2	100	15	TO-205AF
IRHF3110	100	0.6	3.5	2.2	300	15	TO-205AF
IRHE3110	100	0.6	3.5	2.2	300	15	18-pin LCC
IRHE4110	100	0.6	3.5	2.2	500	15	18-pin LCC
IRHF4110	100	0.6	3.5	2.2	500	15	TO-205AF
IRHF8110	100	0.6	3.5	2.2	1000	15	TO-205AF
IRHE8110	100	0.6	3.5	2.2	1000	15	18-pin LCC

IRHNA67164	150	0.018	56	49	100	250	SMD-2
IRHNA63164	150	0.018	56	49	300	250	SMD-2
IRHMS67164	150	0.019	45	44	100	208	TO-254AA LO
IRHMS63164	150	0.019	45	44	300	208	TO-254AA LO
IRHNJ67134	150	0.088	19	12	100	75	SMD-0.5
IRHNJ63134	150	0.088	19	12	300	75	SMD-0.5
IRHYS67134CM	150	0.09	19	12	100	75	TO-257AA LO
IRHYB67134CM	150	0.09	19	12	100	75	TO-257AA LO
IRHYB63134CM	150	0.09	19	12	300	75	TO-257AA LO

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose HardenedSingle N-Channel (cont.)

IRHYS63134CM	150	0.09	19	12	300	75	TO-257AA LO
IRHNA67260	200	0.028	63	40	100	250	SMD-2
IRHNA63260	200	0.028	63	40	300	250	SMD-2
IRHMS67260	200	0.029	45	35	100	208	TO-254AA LO
IRHMS63260	200	0.029	45	35	300	208	TO-254AA LO
IRHNA57260	200	0.038	55	35	100	300	SMD-2
IRHNA53260	200	0.038	55	35	300	300	SMD-2
IRHNA54260	200	0.038	55	35	500	300	SMD-2
IRHNA58260	200	0.038	55	35	1000	300	SMD-2
IRHM57260	200	0.044	35	35	100	250	TO-254AA
IRHM53260	200	0.044	35	35	300	250	TO-254AA
IRHM54260	200	0.044	35	35	500	250	TO-254AA
IRHM58260	200	0.044	35	35	1000	250	TO-254AA
JANSR2N7433U	200	0.07	43	27	100	300	SMD-2
IRHNB7260	200	0.07	43	27	100	300	SMD-3
JANSR2N7433	200	0.07	35	25	100	250	TO-254AA
IRHNA7260	200	0.07	43	27	100	300	SMD-2
IRHM7260	200	0.07	35	25	100	250	TO-254AA
IRHNA3260	200	0.07	43	27	300	300	SMD-2
JANSF2N7433	200	0.07	35	25	300	250	TO-254AA
JANSF2N7433U	200	0.07	43	27	300	300	SMD-2
IRHM3260	200	0.07	35	25	300	250	TO-254AA
IRHNB3260	200	0.07	43	27	300	300	SMD-3
JANSF2N7433U	200	0.07	43	27	500	300	SMD-2
IRHM4260	200	0.07	35	25	500	250	TO-254AA
IRHNA4260	200	0.07	43	27	500	300	SMD-2
JANSF2N7433	200	0.07	35	25	500	250	TO-254AA
IRHNB4260	200	0.07	43	27	500	300	SMD-3
JANSF2N7433	200	0.07	35	25	1000	250	TO-254AA
IRHNA8260	200	0.07	43	27	1000	300	SMD-2
JANSF2N7433U	200	0.07	43	27	1000	300	SMD-2
IRHNB8260	200	0.07	43	27	1000	300	SMD-3
IRHM8260	200	0.07	35	25	1000	250	TO-254AA
IRHMJ7250	200	0.1	26	16	100	150	D3
JANSR2N7269U	200	0.1	26	16	100	150	SMD-1
IRHN7250	200	0.1	26	16	100	150	SMD-1
JANSR2N7269	200	0.1	26	16	100	150	TO-254AA
IRHM7250	200	0.1	26	16	100	150	TO-254AA
JANSF2N7269U	200	0.1	26	16	300	150	SMD-1
IRHN3250	200	0.1	26	16	300	150	SMD-1
IRHM3250	200	0.1	26	16	300	150	TO-254AA

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

IRHMJ3250	200	0.1	26	16	300	150	D3
JANSFN2N7269	200	0.1	26	16	300	150	TO-254AA
JANSNG2N7269	200	0.1	26	16	500	150	TO-254AA
IRHM4250	200	0.1	26	16	500	150	TO-254AA
JANSNG2N7269U	200	0.1	26	16	500	150	SMD-1
IRHMJ4250	200	0.1	26	16	500	150	D3
IRHN4250	200	0.1	26	16	500	150	SMD-1
IRHMJ8250	200	0.1	26	16	1000	150	D3
JANSH2N7269U	200	0.1	26	16	1000	150	SMD-1
JANSH2N7269	200	0.1	26	16	1000	150	TO-254AA
IRHM8250	200	0.1	26	16	1000	150	TO-254AA
IRHN8250	200	0.1	26	16	1000	150	SMD-1
IRH7250	200	0.11	26	16	100	150	TO-204AE
IRH3250	200	0.11	26	16	300	150	TO-204AE
IRH4250	200	0.11	26	16	500	150	TO-204AE
IRH8250	200	0.11	26	16	1000	150	TO-204AE
IRHNJ67230	200	0.13	16	10	100	75	SMD-0.5
IRHYB67230CM	200	0.13	16	10	100	75	TO-257AA LO
IRHYS67230CM	200	0.13	16	10	100	75	TO-257AA LO
IRHYS63230CM	200	0.13	16	10	300	75	TO-257AA LO
IRHYB63230CM	200	0.13	16	10	300	75	TO-257AA LO
IRHNJ63230	200	0.13	16	10	300	75	SMD-0.5
IRHNJ57230	200	0.2	13	8.2	100	75	SMD-0.5
IRHY57230CM	200	0.2	12.5	8	100	75	TO-257AA
IRHY53230CM	200	0.2	12.5	8	300	75	TO-257AA
IRHNJ53230	200	0.2	13	8.2	300	75	SMD-0.5
IRHNJ54230	200	0.2	13	8.2	500	75	SMD-0.5
IRHY54230CM	200	0.2	12.5	8	500	75	TO-257AA
IRHNJ58230	200	0.2	13	8.2	1000	75	SMD-0.5
IRHY58230CM	200	0.2	12.5	8	1000	75	TO-257AA
IRHF57230	200	0.22	7.3	4.5	100	25	TO-205AF
IRHF53230	200	0.22	7.3	4.5	300	25	TO-205AF
IRHF54230	200	0.22	7.3	4.5	500	25	TO-205AF
IRHF58230	200	0.22	7.3	4.5	1000	25	TO-205AF
IRHE7230	200	0.35	5.5	3.5	100	25	18-pin LCC
JANSRN2N7262U	200	0.35	5.5	3.5	100	25	18-pin LCC
JANSRN2N7262	200	0.35	5.5	3.5	100	25	TO-205AF
IRHF7230	200	0.35	5.5	3.5	100	25	TO-205AF
JANSFN2N7262	200	0.35	5.5	3.5	300	25	TO-205AF
IRHF3230	200	0.35	5.5	3.5	300	25	TO-205AF
JANSFN2N7262U	200	0.35	5.5	3.5	300	25	18-pin LCC
IRHE3230	200	0.35	5.5	3.5	300	25	18-pin LCC
JANSNG2N7262U	200	0.35	5.5	3.5	500	25	18-pin LCC

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

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Asia: +65 6838 4632

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose HardenedSingle N-Channel (cont.)

MOSFETs

IRHF4230	200	0.35	5.5	3.5	500	25	TO-205AF
IRHE4230	200	0.35	5.5	3.5	500	25	18-pin LCC
JANSG2N7262	200	0.35	5.5	3.5	500	25	TO-205AF
JANSH2N7262U	200	0.35	5.5	3.5	1000	25	18-pin LCC
IRHF8230	200	0.35	5.5	3.5	1000	25	TO-205AF
JANSH2N7262	200	0.35	5.5	3.5	1000	25	TO-205AF
IRHE8230	200	0.35	5.5	3.5	1000	25	18-pin LCC
IRH7230	200	0.4	9	6	100	75	TO-204AA
JANSR2N7381	200	0.4	9.4	6	100	75	TO-257AA
IRHM7230	200	0.4	9	6	100	75	TO-254AA
IRHNJ7230	200	0.4	9.4	6	100	75	SMD-0.5
IRHY7230CM	200	0.4	9.4	6	100	75	TO-257AA
IRHN7230	200	0.4	9	6	100	75	SMD-1
IRH3230	200	0.4	9	6	300	75	TO-204AA
IRHN3230	200	0.4	9	6	300	75	SMD-1
JANSF2N7381	200	0.4	9.4	6	300	75	TO-257AA
IRHM3230	200	0.4	9	6	300	75	TO-254AA
IRHNJ3230	200	0.4	9.4	6	300	75	SMD-0.5
IRHY3230CM	200	0.4	9.4	6	300	75	TO-257AA
IRHNJ4230	200	0.4	9.4	6	500	75	SMD-0.5
IRHM4230	200	0.4	9	6	500	75	TO-254AA
IRHN4230	200	0.4	9	6	500	75	SMD-1
IRHY4230CM	200	0.4	9.4	6	500	75	TO-257AA
IRH4230	200	0.4	9	6	500	75	TO-204AA
JANSG2N7381	200	0.4	9.4	6	500	75	TO-257AA
IRHNJ8230	200	0.4	9.4	6	1000	75	SMD-0.5
IRHY8230CM	200	0.4	9.4	6	1000	75	TO-257AA
JANSH2N7381	200	0.4	9.4	6	1000	75	TO-257AA
IRH8230	200	0.4	9	6	1000	75	TO-204AA
IRHN8230	200	0.4	9	6	1000	75	SMD-1
IRHM8230	200	0.4	9	6	1000	75	TO-254AA
IRHF7210	200	1.5	2	1.3	100	15	TO-205AF
IRHF8210	200	1.5	2	1.3	1000	15	TO-205AF

IRHNA67264	250	0.04	50	31.5	100	250	SMD-2
IRHNA63264	250	0.04	50	31.5	300	250	SMD-2
IRHMS67264	250	0.041	45	28.5	100	208	TO-254AA LO
IRHMS63264	250	0.041	45	28.5	300	208	TO-254AA LO
IRHNJ67234	250	0.21	12.4	7.8	100	75	SMD-0.5
IRHY67234CM	250	0.22	12	7.6	100	75	TO-257AA LO

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single N-Channel (cont.)

IRHM7360	400	0.22	22	14	100	250	TO-254AA
IRHM8360	400	0.22	22	14	1000	250	TO-254AA
JANSR2N7270U	500	0.45	11	7	100	150	SMD-1
JANSR2N7270	500	0.45	11	7	100	150	TO-254AA
IRHM7450	500	0.45	11	7	100	150	TO-254AA
IRH7450	500	0.45	11	7	100	150	TO-204AA
IRHN7450	500	0.45	11	7	100	150	SMD-1
IRHN8450	500	0.45	11	7	1000	150	SMD-1
IRH8450	500	0.45	11	7	1000	150	TO-204AA
IRHM8450	500	0.45	11	7	1000	150	TO-254AA
JANSH2N7270	500	0.45	11	7	1000	150	TO-254AA
JANSH2N7270U	500	0.45	11	7	1000	150	SMD-1

Single P-Channel

IRHMS597Z60	-30	0.013	-45	-45	100	208	TO-254AA LO
IRHNA597Z60	-30	0.013	-56	-56	100	250	SMD-2
IRHMS593Z60	-30	0.013	-45	-45	300	208	TO-254AA LO
IRHNA593Z60	-30	0.013	-56	-56	300	250	SMD-2
IRHYB597Z30CM	-30	0.048	-20	-18	100	75	TO-257AA
IRHYB593Z30CM	-30	0.048	-20	-18	300	75	TO-257AA
IRHNJ597Z30	-30	0.07	-22	-18	100	75	SMD-0.5
IRHNJ593Z30	-30	0.07	-22	-18	300	75	SMD-0.5
IRHYS597Z30CM	-30	0.072	-20	-18	100	75	TO-257AA LO
IRHYS593Z30CM	-30	0.072	-20	-18	300	75	TO-257AA LO

IRHNA597064	-60	0.015	-75	-63	100	300	SMD-2
IRHNA593064	-60	0.015	-75	-63	300	300	SMD-2
IRHMS597064	-60	0.016	-45	-45	100	208	TO-254AA LO
IRHMS593064	-60	0.016	-45	-45	300	208	TO-254AA LO
JANSR2N7424U	-60	0.045	-48	-30	100	300	SMD-2
IRHNA9064	-60	0.045	-48	-30	100	300	SMD-2
JANSF2N7424U	-60	0.045	-48	-30	300	300	SMD-2
IRHNA93064	-60	0.045	-48	-30	300	300	SMD-2
JANSR2N7424	-60	0.05	-35	-30	100	250	TO-254AA
IRHM9064	-60	0.05	-35	-30	100	250	TO-254AA
IRHM93064	-60	0.05	-35	-30	300	250	TO-254AA
JANSF2N7424	-60	0.05	-35	-30	300	250	TO-254AA
IRHNJ597034	-60	0.06	-22	-16	100	75	SMD-0.5

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single P-Channel (cont.)

IRHNJ593034	-60	0.06	-22	-16	300	75	SMD-0.5
IRHY597034CM	-60	0.07	-18	-16	100	75	TO-257AA
IRHY593034CM	-60	0.07	-18	-16	300	75	TO-257AA
IRHYB597034CM	-60	0.087	-20	-13	100	75	TO-257AA LO
IRHYB597034CM	-60	0.087	-20	-13	100	75	TO-257AA LO
IRHYS593034CM	-60	0.087	-20	-13	300	75	TO-257AA LO
IRHYB593034CM	-60	0.087	-20	-13	300	75	TO-257AA LO
IRHLF7970Z4	-60	1.2	-1.6	-1	100	5	TO-205AF
IRHLF7930Z4	-60	1.2	-1.6	-1	300	5	TO-205AF
IRHLUB7970Z4	-60	1.3	-0.53	-0.33	100	0.6	UB
IRHLUB7930Z4	-60	1.3	-0.53	-0.33	300	0.6	UB

IRHMS597160	-100	0.049	-45	-30	100	250	TO-254AA LO
IRHNA597160	-100	0.049	-52	-33	100	300	SMD-2
IRHNA593160	-100	0.049	-52	-33	300	300	SMD-2
IRHMS593160	-100	0.049	-45	-30	300	250	TO-254AA LO
IRHMK597160	-100	0.05	-45	-30	100	208	D3 LO
IRHMK593160	-100	0.05	-45	-30	300	208	D3 LO
JANSR2N7425U	-100	0.068	-38	-24	100	300	SMD-2
IRHNA9160	-100	0.068	-38	-24	100	300	SMD-2
JANSF2N7425U	-100	0.068	-38	-24	300	300	SMD-2
IRHNA93160	-100	0.068	-38	-24	300	300	SMD-2
JANSR2N7425	-100	0.073	-35	-22	100	250	TO-254AA
IRHM9160	-100	0.073	-35	-22	100	250	TO-254AA
JANSF2N7425	-100	0.073	-35	-22	300	250	TO-254AA
IRHM93160	-100	0.073	-35	-22	300	250	TO-254AA
IRH9150	-100	0.075	-22	-14	100	150	TO-204AE
IRH93150	-100	0.075	-22	-14	300	150	TO-204AE
JANSR2N7422U	-100	0.08	-22	-14	100	150	SMD-1
JANSR2N7422	-100	0.08	-22	-14	100	150	TO-254AA
IRHN9150	-100	0.08	-22	-14	100	150	SMD-1
IRHM9150	-100	0.08	-22	-14	100	150	TO-254AA
JANSF2N7422	-100	0.08	-22	-14	300	150	TO-254AA
IRHN93150	-100	0.08	-22	-14	300	150	SMD-1
IRHM93150	-100	0.08	-22	-14	300	150	TO-254AA
JANSF2N7422U	-100	0.08	-22	-14	300	150	SMD-1
JANSR2N7545U3	-100	0.205	-12.5	-8	100	75	SMD-0.5
IRHNJ597130	-100	0.205	-12.5	-8	100	75	SMD-0.5
JANSF2N7545U3	-100	0.205	-12.5	-8	300	75	SMD-0.5
IRHNJ593130	-100	0.205	-12.5	-8	300	75	SMD-0.5
IRHY597130CM	-100	0.215	-12.5	-8	100	75	TO-257AA
IRHY593130CM	-100	0.215	-12.5	-8	300	75	TO-257AA

N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

For data sheets visit our Web site
at <http://hirel.irf.com>

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Total Ionizing Dose Hardened

Single P-Channel (cont.)

IRHF597130	-100	0.24	-6.7	-4.3	100	25	TO-205AF
IRHF593130	-100	0.24	-6.7	-4.3	300	25	TO-205AF
IRHNJ9130	-100	0.29	-11	-7	100	75	SMD-0.5
IRHNJ93130	-100	0.29	-11	-7	300	75	SMD-0.5
IRHN9130	-100	0.3	-11	-7	100	75	SMD-1
IRHM9130	-100	0.3	-11	-7	100	75	TO-254AA
IRHE9130	-100	0.3	-6.5	-4.1	100	25	18-pin LCC
JANSR2N7389U	-100	0.3	-6.5	-4.1	100	25	18-pin LCC
JANSR2N7389	-100	0.3	-6.5	-4.1	100	25	TO-205AF
IRHF9130	-100	0.3	-6.5	-4.1	100	25	TO-205AF
JANSR2N7382	-100	0.3	-11	-7	100	75	TO-257AA
IRHY9130CM	-100	0.3	-11	-7	100	75	TO-257AA
IRH9130	-100	0.3	-11	-7	100	75	TO-204AA
IRHM93130	-100	0.3	-11	-7	300	75	TO-254AA
IRHY93130CM	-100	0.3	-11	-7	300	75	TO-257AA
IRHF93130	-100	0.3	-6.5	-4.1	300	25	TO-205AF
IRHN93130	-100	0.3	-11	-7	300	75	SMD-1
IRH93130	-100	0.3	-11	-7	300	75	TO-204AA
JANSF2N7382	-100	0.3	-11	-7	300	75	TO-257AA
IRHE93130	-100	0.3	-6.5	-4.1	300	25	18-pin LCC
JANSF2N7389U	-100	0.3	-6.5	-4.1	300	25	18-pin LCC
JANSF2N7389	-100	0.3	-6.5	-4.1	300	25	TO-205AF
IRHF597110	-100	1	-2.6	-1.6	100	15	TO-205AF
IRHF593110	-100	1	-2.6	-1.6	300	15	TO-205AF

IRHNA597260	-200	0.102	-35.5	-22.5	100	300	SMD-2
IRHNA593260	-200	0.102	-35.5	-22.5	300	300	SMD-2
IRHMS597260	-200	0.103	-32	-20	100	208	TO-254AA LO
IRHMS593260	-200	0.103	-32	-20	300	208	TO-254AA LO
JANSR2N7426U	-200	0.154	-29	-18	100	300	SMD-2
IRHNA9260	-200	0.154	-29	-18	100	300	SMD-2
JANSF2N7426U	-200	0.154	-29	-18	300	300	SMD-2
IRHNA93260	-200	0.154	-29	-18	300	300	SMD-2
JANSR2N7426	-200	0.16	-27	-17	100	250	TO-254AA
IRHM9260	-200	0.16	-27	-17	100	250	TO-254AA
IRHM93260	-200	0.16	-27	-17	300	250	TO-254AA
JANSF2N7426	-200	0.16	-27	-17	300	250	TO-254AA
JANSR2N7423U	-200	0.315	-14	-9	100	150	SMD-1
JANSR2N7423	-200	0.315	-14	-9	100	150	TO-254AA
IRHN9250	-200	0.315	-14	-9	100	150	SMD-1
IRHM9250	-200	0.315	-14	-9	100	150	TO-254AA
IRH9250	-200	0.315	-14	-9	100	150	TO-204AE

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

Part Number	Max	Resistance	Max	Max	Radiation Level krad (Si)	Max Power	Package
	Breakdown	Drain to	Continuous	Continuous		Dissipation	
	Voltage Drain to Source BV _{DSS} (V)	Source R _{DS(on)} (Ω)	Drain Current I _D (A)	Drain Current I _D @ 100°C (A)		P _D (W)	

Total Ionizing Dose Hardened

Single P-Channel (cont.)

IRH93250	-200	0.315	-14	-9	300	150	TO-204AE
JANSF2N7423	-200	0.315	-14	-9	300	150	TO-254AA
IRHM93250	-200	0.315	-14	-9	300	150	TO-254AA
JANSF2N7423U	-200	0.315	-14	-9	300	150	SMD-1
IRHN93250	-200	0.315	-14	-9	300	150	SMD-1
IRHNJ597230	-200	0.505	-8	-5	100	75	SMD-0.5
IRHNJ593230	-200	0.505	-8	-5	300	75	SMD-0.5
IRHF597230	-200	0.54	-4.5	-3	100	25	TO-205AF
IRHF593230	-200	0.54	-4.5	-3	300	25	TO-205AF
IRHY597230CM	-200	0.55	-8	-5	100	75	TO-257AA
IRHY593230CM	-200	0.55	-8	-5	300	75	TO-257AA
IRH9230	-200	0.8	-6	-4	100	75	TO-204AA
IRHE9230	-200	0.8	-4	-2.4	100	25	18-pin LCC
JANSR2N7383	-200	0.8	-6.5	-4	100	75	TO-257AA
IRHY9230CM	-200	0.8	-6.5	-4	100	75	TO-257AA
IRHM9230	-200	0.8	-6.5	-4.1	100	75	TO-254AA
IRHF9230	-200	0.8	-4	-2.4	100	25	TO-205AF
IRHN9230	-200	0.8	-6.5	-4	100	75	SMD-1
JANSR2N7390	-200	0.8	-4	-2.4	100	25	TO-205AF
JANSR2N7390U	-200	0.8	-4	-2.4	100	25	18-pin LCC
IRHE93230	-200	0.8	-4	-2.4	300	25	18-pin LCC
JANSF2N7383	-200	0.8	-6.5	-4	300	75	TO-257AA
IRHN93230	-200	0.8	-6.5	-4	300	75	SMD-1
JANSF2N7390	-200	0.8	-4	-2.4	300	25	TO-205AF
JANSF2N7390U	-200	0.8	-4	-2.4	300	25	18-pin LCC
IRH93230	-200	0.8	-6	-4	300	75	TO-204AA
IRHF93230	-200	0.8	-4	-2.4	300	25	TO-205AF
IRHM93230	-200	0.8	-6.5	-4.1	300	75	TO-254AA
IRHY93230CM	-200	0.8	-6.5	-4	300	75	TO-257AA

Single Event Effect Hardened

Quad N-Channel

IRHQ57214SE	250	1.5	1.9	1.2	100	12	28-pin LCC
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Single N-Channel

JANSR2N7472U2	130	0.0135	75	62	100	300	SMD-2
IRHNA57163SE	130	0.0135	75	62	100	300	SMD-2
IRHMS57163SE	130	0.0145	45	45	100	208	TO-254AA LO
JANSR2N7475T1	130	0.0145	45	45	100	208	TO-254AA LO
IRHNJ57133SE	130	0.08	20	12.5	100	75	SMD-0.5
JANSR2N7485U3	130	0.08	20	12.5	100	75	SMD-0.5

N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

For data sheets visit our Web site
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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Single Event Effect Hardened

Single N-Channel (cont.)

IRHYK57133CMSE	130	0.082	20	12.5	100	75	D2 LO
IRHY57133CMSE	130	0.09	18	12	100	75	TO-257AA
JANSR2N7488T3	130	0.09	18	12	100	75	TO-257AA
JANSR2N7497T2	130	0.1	10.5	6.5	100	25	TO-205AF
IRHF57133SE	130	0.1	10.5	6.5	100	25	TO-205AF
JANSR2N7500U5	130	0.1	9	5.7	100	25	18-pin LCC
IRHE57133SE	130	0.1	9	5.7	100	25	18-pin LCC

JANSR2N7473U2	200	0.038	55	35	100	300	SMD-2
IRHNA57260SE	200	0.038	55	35	100	300	SMD-2
IRHMB57260SE	200	0.044	45	29	100	208	TO-254AA LO
IRHMK57260SE	200	0.044	45	29	100	208	D3 LO
JANSR2N7476T1	200	0.044	45	29	100	208	TO-254AA LO
IRHMS57260SE	200	0.044	45	29	100	208	TO-254AA LO
IRHMS7260SE	200	0.044	35	35	100	250	TO-254AA
IRHMJ57260SE	200	0.049	35	28	100	208	D3
IRHN57250SE	200	0.06	31	19	100	150	SMD-1
IRHM7250SE	200	0.1	26	16	100	150	TO-254AA
IRHN7250SE	200	0.1	26	16	100	150	SMD-1
IRH7250SE	200	0.1	26	16	100	150	TO-204AE
JANSR2N7486U3	200	0.22	12	7.8	100	75	SMD-0.5
IRHNJ57230SE	200	0.22	12	7.8	100	75	SMD-0.5
JANSR2N7489T3	200	0.23	12	7.8	100	75	TO-257AA
IRHY57230CMSE	200	0.23	12	7.8	100	75	TO-257AA
IRHF57230SE	200	0.24	7	4.5	100	25	TO-205AF
JANSR2N7498T2	200	0.24	7	4.5	100	25	TO-205AF

JANSR2N7474U2	250	0.06	49	31	100	300	SMD-2
IRHNA57264SE	250	0.06	49	31	100	300	SMD-2
IRHMS57264SE	250	0.061	37	23.5	100	208	TO-254AA LO
JANSR2N7477T1	250	0.061	37	23.5	100	208	TO-254AA LO
IRHMS7264SE	250	0.066	35	26	100	250	TO-254AA
IRHNB7264SE	250	0.11	34	21	100	300	SMD-3
IRHNA7264SE	250	0.11	34	21	100	300	SMD-2
IRHM7264SE	250	0.11	31	19	100	250	TO-254AA
JANSR2N7434	250	0.11	31	19	100	250	TO-254AA
IRHNJ57234SE	250	0.4	10	6.4	100	75	SMD-0.5
JANSR2N7487U3	250	0.4	10	6.4	100	75	SMD-0.5
IRHY57234CMSE	250	0.41	10	6.4	100	75	TO-257AA
JANSR2N7490T3	250	0.41	10	6.4	100	75	TO-257AA

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source B _{VDS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Single Event Effect Hardened

Single N-Channel (cont.)

IRHF57234SE	250	0.42	5.4	3.4	100	25	TO-205AF
JANSR2N7499T2	250	0.42	5.4	3.4	100	25	TO-205AF
IRHI7360SE	400	0.2	24	15	100	300	TO-259AA
IRHNB7360SE	400	0.2	24	15	100	300	SMD-3
IRHM7360SE	400	0.2	22	14	100	250	TO-254AA
IRHNA7360SE	400	0.2	24	15	100	300	SMD-2
JANSR2N7391	400	0.2	22	14	100	250	TO-254AA
IRHF7330SE	400	1.2	3	1.9	100	25	TO-205AF
JANSR2N7463T2	400	1.2	3	1.9	100	25	TO-205AF
JANSR2N7465U3	400	1.2	5.3	3.4	100	75	SMD-0.5
IRHNJ7330SE	400	1.2	5.3	3.4	100	75	SMD-0.5
IRHF7310SE	400	4.5	1.15	0.7	100	15	TO-205AF

IRHI7460SE	500	0.32	20	12	100	300	TO-259AA
IRHNA7460SE	500	0.32	20	12	100	300	SMD-2
JANSR2N7392	500	0.32	18	11.7	100	250	TO-254AA
IRHNB7460SE	500	0.32	20	12	100	300	SMD-3
IRHM7460SE	500	0.32	18	11.7	100	250	TO-254AA
IRHN7450SE	500	0.51	12	7	100	151	SMD-1
IRHM7450SE	500	0.51	12	7	100	151	TO-254AA
IRHNA7450SE	500	0.51	12	7	100	150	SMD-2
IRH7450SE	500	0.51	12	7	100	151	TO-204AA
IRHNJ7430SE	500	1.6	4.5	2.8	100	75	SMD-0.5
JANSR2N7466U3	500	1.6	4.5	2.8	100	75	SMD-0.5
JANSR2N7464T2	500	1.65	2.6	1.6	100	25	TO-205AF
IRHF7430SE	500	1.65	2.6	1.6	100	25	TO-205AF

IRHN2C50SE	600	0.6	10.4	6.5	50	150	SMD-1
IRHM2C50SE	600	0.6	10.4	6.5	50	151	TO-254AA
IRHN7C50SE	600	0.6	10.4	6.5	100	150	SMD-1
IRHM7C50SE	600	0.6	10.4	6.5	100	151	TO-254AA

Standard

Quad N-Channel

OMD100	100	0.08	25	16	N/A	125	M-12
IRFG110	100	0.7	1	0.6	N/A	1.4	MO-036AB
JANTX2N7334	100	0.7	1	0.6	N/A	1.4	MO-036AB

N/A = Not Applicable

All specifications @ 25°C unless noted

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Technical Assistance U.S.: +1 310 252 7105
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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Quad N-Channel (cont.)

JANTXV2N7334	100	0.7	1	0.6	N/A	1.4	MO-036AB
OMD200	200	0.11	25	16	N/A	125	M-12
OMD400	400	0.35	13	8	N/A	125	M-12
OMD500	500	0.43	11	7	N/A	125	M-12

Quad P-Channel

IRFG9110	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB
JANTX2N7335	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB
JANTXV2N7335	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB

2 N- & 2 P-Channel

IRFG5110(N)	100	0.7	1	0.6	N/A	1.4	MO-036AB
IRFG5110(P)	-100	0.7	-1	-0.6	N/A	1.4	MO-036AB
IRFG6110(N)	100	0.7	1	0.6	N/A	1.4	MO-036AB
IRFG6110(P)	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB
JANTX2N7336(N)	100	0.7	1	0.6	N/A	1.4	MO-036AB
JANTX2N7336(P)	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB
JANTXV2N7336(N)	100	0.7	1	0.6	N/A	1.4	MO-036AB
JANTXV2N7336(P)	-100	1.4	-0.75	-0.5	N/A	1.4	MO-036AB
IRFG5210(N)	200	1.6	0.68	0.4	N/A	1.4	MO-036AB
IRFG5210(P)	-200	1.6	-0.68	-0.4	N/A	1.4	MO-036AB

Dual N-Channel

OM6214SS	100	0.065	35	20	N/A	50	S-6
OM6215SS	200	0.095	28	19	N/A	125	S-6

All specifications @ 25°C unless noted

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source B _{VDS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Dual N-Channel (cont.)

OM6216SS	400	0.3	15	9	N/A	125	S-6
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OM6217SS	500	0.4	13	8	N/A	125	S-6
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Single N-Channel

IRL7NJ3802	12	0.0085	22	22	N/A	50	SMD-0.5
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IRF7F3704	20	0.05	12	10.6	N/A	20	TO-205AF
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IRF7E3704	20	0.055	12	10	N/A	20	18-pin LCC
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IRL5NJ7413	30	0.014	22	22	N/A	75	SMD-0.5
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IRL5Y7413CM	30	0.022	18	18	N/A	75	TO-257AA
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IRL7N1404	40	0.006	55	55	N/A	100	SMD-1
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IRL7YS1404CM	40	0.0085	20	20	N/A	100	TO-257AA LO
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IRL7Y1905C	50	0.125	10	5	N/A	15	TO-257AA
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IRF7N1405	55	0.0053	55	55	N/A	100	SMD-1
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IRF5N3205	55	0.008	55	55	N/A	75	SMD-1
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IRF5M3205	55	0.015	35	35	N/A	125	TO-254AA
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IRF7Y1405CM	55	0.0153	18	18	N/A	100	TO-257AA
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IRF5NJ248	55	0.016	22	22	N/A	75	SMD-0.5
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IRF5Y3205CM	55	0.022	18	18	N/A	100	TO-257AA
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IRF5Y248CM	55	0.026	18	18	N/A	75	TO-257AA
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IRF5NJZ34	55	0.04	22	16	N/A	40	SMD-0.5
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IRL5NJ024	55	0.06	17	11	N/A	35	SMD-0.5
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IRL5Y024CM	55	0.069	17	11	N/A	35	TO-257AA
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IRF7NJZ44V	60	0.0165	22	22	N/A	50	SMD-0.5
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IRFV064	60	0.017	45	45	N/A	300	TO-258AA
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N/A = Not Applicable
LO = Low Ohmic

All specifications @ 25°C unless noted

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single N-Channel (cont.)

IRFM064	60	0.017	35	35	N/A	250	TO-254AA
IRFI064	60	0.017	45	45	N/A	300	TO-259AA
IRF7YSZ44VCM	60	0.0195	20	20	N/A	50	TO-257AA LO
IRFN054	60	0.02	55	40	N/A	150	SMD-1
IRF054	60	0.022	45	31	N/A	150	TO-204AE
IRFM054	60	0.027	35	35	N/A	150	TO-254AA
IRF044	60	0.028	44	27	N/A	125	TO-204AE
IRFY044CM	60	0.04	16	16	N/A	100	TO-257AA
IRFN044	60	0.04	44	27	N/A	125	SMD-1
IRFM044	60	0.04	35	28	N/A	125	TO-254AA
IRF034	60	0.05	25	16	N/A	75	TO-204AE
IRFE024	60	0.15	6.7	4.2	N/A	14	18-pin LCC
IRFF024	60	0.15	8	5.7	N/A	20	TO-205AF

IRF7NA2907	75	0.0045	75	75	N/A	313	SMD-2
IRF7MS2907	75	0.0055	45	45	N/A	208	TO-254AA LO

OM60N10SC	100	0.025	60	37	N/A	130	TO-258AA
IRF5N3710	100	0.028	45	30	N/A	125	SMD-1
IRF5M3710	100	0.03	35	29	N/A	125	TO-254AA
IRF5Y3710CM	100	0.035	18	18	N/A	100	TO-257AA
IRF5EA1310	100	0.036	23	15	N/A	38	28-pin LCC
IRF5Y1310CM	100	0.044	18	18	N/A	100	TO-257AA
IRF5NJ540	100	0.052	22	16	N/A	75	SMD-0.5
JANTXV2N6764	100	0.055	38	24	N/A	150	TO-204AE
IRFI50	100	0.055	38	24	N/A	150	TO-204AE
2N6764	100	0.055	38	24	N/A	150	TO-204AE
JANTX2N6764	100	0.055	38	24	N/A	150	TO-204AE
IRF5Y540CM	100	0.058	25.6	16	N/A	75	TO-257AA
JANTX2N7224U	100	0.06	34	21	N/A	150	SMD-1
IRFN150	100	0.06	34	21	N/A	150	SMD-1
JANTXV2N7224U	100	0.06	34	21	N/A	150	SMD-1
OM6021SC	100	0.065	35	25	N/A	125	TO-259AA
OM6005SC	100	0.065	35	25	N/A	125	TO-258AA
JANTXV2N7224	100	0.07	34	21	N/A	150	TO-254AA
IRFM150	100	0.07	34	21	N/A	150	TO-254AA
JANTX2N7224	100	0.07	34	21	N/A	150	TO-254AA
IRFM140	100	0.077	28	20	N/A	125	TO-254AA
IRFN140	100	0.077	28	20	N/A	125	SMD-1
IRFI40	100	0.077	28	20	N/A	125	TO-204AE

All specifications @ 25°C unless noted
LO = Low Ohmic

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source B _{VDS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
Standard							
Single N-Channel (cont.)							
JANTX2N7218	100	0.077	28	20	N/A	125	TO-254AA
JANTX2N7218U	100	0.077	28	20	N/A	125	SMD-1
JANTXV2N7218	100	0.077	28	20	N/A	125	TO-254AA
JANTXV2N7218U	100	0.077	28	20	N/A	125	SMD-1
IRFY140CM	100	0.077	16	16	N/A	100	TO-257AA
JANTX2N6796U	100	0.18	8	5	N/A	25	18-pin LCC
IRFF130	100	0.18	8	5	N/A	25	TO-205AF
IRFY130CM	100	0.18	14.4	9.1	N/A	75	TO-257AA
2N6796	100	0.18	8	5	N/A	25	TO-205AF
JANTXV2N6796U	100	0.18	8	5	N/A	25	18-pin LCC
IRFE130	100	0.18	8	5	N/A	25	18-pin LCC
JANTXV2N6796	100	0.18	8	5	N/A	25	TO-205AF
IRF130	100	0.18	14	9	N/A	75	TO-204AA
JANTX2N6796	100	0.18	8	5	N/A	25	TO-205AF
JANTXV2N6756	100	0.18	14	9	N/A	75	TO-204AA
2N6756	100	0.18	14	9	N/A	75	TO-204AA
JANTX2N6756	100	0.18	14	9	N/A	75	TO-204AA
OM6001SR	100	0.2	14	9	N/A	50	D2
IRF120	100	0.27	9.2	—	N/A	—	TO-204AA
IRFF120	100	0.3	6	3.5	N/A	20	TO-205AF
JANTX2N6788	100	0.3	6	3.5	N/A	20	TO-205AF
2N6788	100	0.3	6	3.5	N/A	20	TO-205AF
JANTXV2N6788	100	0.3	6	3.5	N/A	20	TO-205AF
IRFE120	100	0.3	6	3.5	N/A	20	18-pin LCC
JANTX2N6788U	100	0.3	6	3.5	N/A	20	18-pin LCC
IRLF120	100	0.35	5.3	3.4	N/A	20	TO-205AF
IRFE110	100	0.6	3.5	2.25	N/A	15	18-pin LCC
JANTX2N6782	100	0.6	3.5	2.25	N/A	15	TO-205AF
IRFF110	100	0.6	3.5	2.25	N/A	15	TO-205AF
JANTXV2N6782	100	0.6	3.5	2.25	N/A	15	TO-205AF
2N6782	100	0.6	3.5	2.25	N/A	15	TO-205AF
JANTX2N6782U	100	0.6	3.5	2.25	N/A	15	18-pin LCC
JANTXV2N6782U	100	0.6	3.5	2.25	N/A	15	18-pin LCC
IRF5N3415	150	0.042	37.5	22	N/A	125	SMD-1
IRF5M3415	150	0.049	35	22	N/A	125	TO-254AA
IRF5NJ3315	150	0.08	20	12	N/A	75	SMD-0.5
IRF5Y3315CM	150	0.085	18	12	N/A	75	TO-257AA
IRFM260	200	0.06	35	28	N/A	250	TO-254AA

N/A = Not Applicable

All specifications @ 25°C unless noted

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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single N-Channel (cont.)

IRFI260	200	0.06	45	29	N/A	300	TO-259AA
IRFV260	200	0.06	45	29	N/A	300	TO-258AA
JANTXV2N6766	200	0.085	30	19	N/A	150	TO-204AE
2N6766	200	0.085	30	19	N/A	150	TO-204AE
JANTX2N6766	200	0.085	30	19	N/A	150	TO-204AE
IRF250	200	0.085	30	19	N/A	150	TO-204AE
IRF5Y31N20	200	0.092	18	14	N/A	100	TO-257AA
JANTXV2N7225U	200	0.1	27.4	17	N/A	150	SMD-1
JANTXV2N7225	200	0.1	27.4	17	N/A	150	TO-254AA
IRFN250	200	0.1	27.4	17	N/A	150	SMD-1
IRFM250	200	0.1	27.4	17	N/A	150	TO-254AA
JANTX2N7225U	200	0.1	27.4	17	N/A	150	SMD-1
JANTX2N7225	200	0.1	27.4	17	N/A	150	TO-254AA
JANTXV2N7219U	200	0.18	18	11	N/A	125	SMD-1
IRFEA240	200	0.18	11	7	N/A	50	28-pin LCC
IRF240	200	0.18	18	11	N/A	125	TO-204AE
JANTXV2N7219	200	0.18	18	11	N/A	125	TO-254AA
IRFM240	200	0.18	18	11	N/A	125	TO-254AA
IRFN240	200	0.18	18	11	N/A	125	SMD-1
JANTX2N7219U	200	0.18	18	11	N/A	125	SMD-1
IRFY240C	200	0.18	16	10.2	N/A	100	TO-257AA
JANTX2N7219	200	0.18	18	11	N/A	125	TO-254AA
IRFY240CM	200	0.18	16	10.2	N/A	100	TO-257AA
2N6758	200	0.4	9	6	N/A	75	TO-204AA
JANTXV2N6798U	200	0.4	5.5	3.5	N/A	25	18-pin LCC
IRFF230	200	0.4	5.5	3.5	N/A	25	TO-205AF
2N6798	200	0.4	5.5	3.5	N/A	25	TO-205AF
JANTX2N6798	200	0.4	5.5	3.5	N/A	25	TO-205AF
JANTX2N6798U	200	0.4	5.5	3.5	N/A	25	18-pin LCC
IRF230	200	0.4	9	6	N/A	75	TO-204AA
IRFE230	200	0.4	5.5	3.5	N/A	25	18-pin LCC
JANTXV2N6758	200	0.4	9	6	N/A	75	TO-204AA
JANTX2N6758	200	0.4	9	6	N/A	75	TO-204AA
JANTXV2N6798	200	0.4	5.5	3.5	N/A	25	TO-205AF
OM6002SR	200	0.44	9	6	N/A	50	D2
2N6790	200	0.8	3.5	2.25	N/A	20	TO-205AF
JANTX2N6790	200	0.8	3.5	2.25	N/A	20	TO-205AF
JANTX2N6790U	200	0.8	2.8	1.8	N/A	14	18-pin LCC
IRFE220	200	0.8	2.8	1.8	N/A	14	18-pin LCC
IRFF220	200	0.8	3.5	2.25	N/A	20	TO-205AF
IRF220	200	0.8	5	—	N/A	—	TO-204AA
JANTXV2N6790	200	0.8	3.5	2.25	N/A	20	TO-205AF
IRFF210	200	1.5	2.25	1.5	N/A	15	TO-205AF

All specifications @ 25°C unless noted

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single N-Channel (cont.)

JANTXV2N6784	200	1.5	2.25	1.5	N/A	15	TO-205AF
JANTX2N6784	200	1.5	2.25	1.5	N/A	15	TO-205AF
IRFE210	200	1.5	2.25	1.5	N/A	15	18-pin LCC
JANTX2N6784U	200	1.5	2.25	1.5	N/A	15	18-pin LCC
2N6784	200	1.5	2.25	1.5	N/A	15	TO-205AF
JANTXV2N6784U	200	1.5	2.25	1.5	N/A	15	18-pin LCC
IRF254	250	0.14	22	—	N/A	—	TO-204AE
IRF244	250	0.28	14	—	N/A	—	TO-204AA
IRF234	250	0.45	8.1	—	N/A	—	TO-204AA
IRF224	250	1.1	3.8	—	N/A	—	TO-204AA
IRFV360	400	0.2	25	16	N/A	300	TO-258AA
IRF360	400	0.2	25	16	N/A	300	TO-204AE
IRFM360	400	0.2	23	14	N/A	250	TO-254AA
IRFI360	400	0.2	25	16	N/A	300	TO-259AA
JANTX2N6768	400	0.3	14	9	N/A	150	TO-204AE
IRF350	400	0.3	14	9	N/A	150	TO-204AE
JANTXV2N6768	400	0.3	14	9	N/A	150	TO-204AE
2N6768	400	0.3	14	9	N/A	150	TO-204AE
JANTXV2N7227U	400	0.315	14	9	N/A	150	SMD-1
IRFN350	400	0.315	14	9	N/A	150	SMD-1
JANTXV2N7227	400	0.315	14	9	N/A	150	TO-254AA
IRFM350	400	0.315	14	9	N/A	150	TO-254AA
JANTX2N7227	400	0.315	14	9	N/A	150	TO-254AA
JANTX2N7227U	400	0.315	14	9	N/A	150	SMD-1
JANTX2N7221	400	0.55	10	6	N/A	125	TO-254AA
IRFM340	400	0.55	10	6	N/A	125	TO-254AA
IRFY340CM	400	0.55	8.7	5.5	N/A	100	TO-257AA
IRFN340	400	0.55	10	6	N/A	125	SMD-1
JANTXV2N7221	400	0.55	10	6	N/A	125	TO-254AA
JANTXV2N7221U	400	0.55	10	6	N/A	125	SMD-1
JANTX2N7221U	400	0.55	10	6	N/A	125	SMD-1
IRF340	400	0.55	10	6	N/A	125	TO-204AA
JANTX2N6800	400	1	3	2	N/A	25	TO-205AF
JANTXV2N6800U	400	1	3	2	N/A	25	18-pin LCC
JANTX2N6800U	400	1	3	2	N/A	25	18-pin LCC
2N6760	400	1	5.5	3.5	N/A	75	TO-204AA
IRFE330	400	1	3	2	N/A	25	18-pin LCC
2N6800	400	1	3	2	N/A	25	TO-205AF

N/A = Not Applicable

All specifications @ 25°C unless noted

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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single N-Channel (cont.)

JANTXV2N6800	400	1	3	2	N/A	25	TO-205AF
IRF330	400	1	5.5	3.5	N/A	75	TO-204AA
IRFF330	400	1	3	2	N/A	25	TO-205AF
JANTXV2N6760	400	1	5.5	3.5	N/A	75	TO-204AA
JANTX2N6760	400	1	5.5	3.5	N/A	75	TO-204AA
OM6003SR	400	1.05	5.5	3.5	N/A	50	D2
JANTXV2N6792	400	1.8	2	1.25	N/A	20	TO-205AF
JANTX2N6792	400	1.8	2	1.25	N/A	20	TO-205AF
IRF320	400	1.8	3.3	—	N/A	—	TO-204AA
JANTXV2N6792U	400	1.8	1.8	1.1	N/A	14	18-pin LCC
IRFF320	400	1.8	2	1.25	N/A	20	TO-205AF
JANTX2N6792U	400	1.8	1.8	1.1	N/A	14	18-pin LCC
2N6792	400	1.8	2	1.25	N/A	20	TO-205AF
IRFE320	400	1.8	1.8	1.1	N/A	14	18-pin LCC
IRFF310	400	3.6	1.25	0.8	N/A	15	TO-205AF
JANTXV2N6786	400	3.6	1.25	0.8	N/A	15	TO-205AF
JANTX2N6786	400	3.6	1.25	0.8	N/A	15	TO-205AF
JANTX2N6786U	400	3.6	1.25	0.8	N/A	15	18-pin LCC
JANTXV2N6786U	400	3.6	1.25	0.8	N/A	15	18-pin LCC
2N6786	400	3.6	1.25	0.8	N/A	15	TO-205AF
IRFE310	400	3.6	1.25	0.8	N/A	15	18-pin LCC

IRFM460	500	0.27	19	12	N/A	250	TO-254AA
IRF460	500	0.27	21	14	N/A	300	TO-204AE
IRFV460	500	0.27	21	13	N/A	300	TO-258AA
IRFI460	500	0.27	21	13	N/A	300	TO-259AA
2N6770	500	0.4	12	7.75	N/A	150	TO-204AA
IRF450	500	0.4	12	7.75	N/A	150	TO-204AA
JANTX2N6770	500	0.4	12	7.75	N/A	150	TO-204AA
JANTXV2N6770	500	0.4	12	7.75	N/A	150	TO-204AA
JANTXV2N7228U	500	0.415	12	8	N/A	150	SMD-1
JANTXV2N7228	500	0.415	12	8	N/A	150	TO-254AA
JANTX2N7228U	500	0.415	12	8	N/A	150	SMD-1
JANTX2N7228	500	0.415	12	8	N/A	150	TO-254AA
IRFMA450	500	0.415	12	8	N/A	150	TO-254AA
IRFN450	500	0.415	12	8	N/A	150	SMD-1
IRFM450	500	0.415	12	8	N/A	150	TO-254AA
IRFY11N50CMA	500	0.53	10	6.6	N/A	125	TO-257AA
JANTX2N7222U	500	0.85	8	5	N/A	125	SMD-1
JANTX2N7222	500	0.85	8	5	N/A	125	TO-254AA
IRF440	500	0.85	8	5	N/A	125	TO-204AA
IRFY440CM	500	0.85	7	4.4	N/A	100	TO-257AA

All specifications @ 25°C unless noted

N/A = Not Applicable

Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
Standard							
Single N-Channel (cont.)							
JANTXV2N7222U	500	0.85	8	5	N/A	125	SMD-1
IRFN440	500	0.85	8	5	N/A	125	SMD-1
IRFM440	500	0.85	8	5	N/A	125	TO-254AA
JANTXV2N7222	500	0.85	8	5	N/A	125	TO-254AA
2N6802	500	1.5	2.5	1.5	N/A	25	TO-205AF
2N6762	500	1.5	4.5	3	N/A	75	TO-204AA
IRFE430	500	1.5	2.5	1.5	N/A	25	18-pin LCC
JANTX2N6802U	500	1.5	2.5	1.5	N/A	25	18-pin LCC
JANTX2N6802	500	1.5	2.5	1.5	N/A	25	TO-205AF
JANTX2N6762	500	1.5	4.5	3	N/A	75	TO-204AA
IRFY430CM	500	1.5	4.5	2.8	N/A	75	TO-257AA
JANTXV2N6762	500	1.5	4.5	3	N/A	75	TO-204AA
IRFF430	500	1.5	2.5	1.5	N/A	25	TO-205AF
IRF430	500	1.5	4.5	3	N/A	75	TO-204AA
JANTXV2N6802U	500	1.5	2.5	1.5	N/A	25	18-pin LCC
JANTXV2N6802	500	1.5	2.5	1.5	N/A	25	TO-205AF
OM6004SR	500	1.6	4.5	3	N/A	50	D2
2N6794	500	3	1.5	1	N/A	20	TO-205AF
JANTX2N6794U	500	3	1.4	0.9	N/A	14	18-pin LCC
JANTX2N6794	500	3	1.5	1	N/A	20	TO-205AF
JANTXV2N6794	500	3	1.5	1	N/A	20	TO-205AF
JANTXV2N6794U	500	3	1.4	0.9	N/A	14	18-pin LCC
IRF420	500	3	2.5	—	N/A	—	TO-204AA
IRFF420	500	3	1.5	1	N/A	20	TO-205AF
IRFE420	500	3	1.4	0.9	N/A	14	18-pin LCC
OM11N60SA	600	0.5	11	7.2	N/A	200	TO-254AA
IRFAC40	600	1.2	6.2	3.9	N/A	125	TO-204AA
IRFAC30	600	2.2	3.6	2.3	N/A	75	TO-204AA
IRFAE50	800	1.2	7.1	4.5	N/A	150	TO-204AA
IRFAE40	800	2	4.8	3	N/A	125	TO-204AA
IRFAE30	800	3.2	3.1	2	N/A	75	TO-204AA
IRFAF50	900	1.6	6.2	4	N/A	150	TO-204AA
IRFAF40	900	2.5	4.3	2.7	N/A	125	TO-204AA
IRFAF30	900	4	2	1.7	N/A	75	TO-204AA

N/A = Not Applicable

All specifications @ 25°C unless noted

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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single N-Channel (cont.)

OM6027SC	1000	1.3	10	—	N/A	165	TO-258AA
IRFMG50	1000	2	5.6	3.5	N/A	150	TO-254AA
IRFAG50	1000	2	5.6	3.5	N/A	150	TO-204AA
IRFNG50	1000	2	5.5	3.5	N/A	150	SMD-1
IRFAG40	1000	3.5	3.9	2.5	N/A	125	TO-204AA
IRFNG40	1000	3.5	3.9	2.5	N/A	125	SMD-1
IRFMG40	1000	3.5	3.9	2.5	N/A	125	TO-254AA
IRFAG30	1000	5.6	2.3	1.5	N/A	75	TO-204AA

Single N-Channel w/Zener

OM6105SC	100	0.065	35	25	N/A	125	TO-258AA
OM6101ST	100	0.2	14	9	N/A	50	TO-257AA
OM6101SR	100	0.2	14	9	N/A	50	D2

OM6106SC	200	0.095	28	19	N/A	125	TO-258AA
OM6102ST	200	0.44	9	6	N/A	50	TO-257AA
OM6102SR	200	0.44	9	6	N/A	50	D2

OM6107SC	400	0.3	15	9	N/A	125	TO-258AA
OM6103ST	400	1.05	5.5	3.5	N/A	50	TO-257AA
OM6103SR	400	1.05	5.5	3.5	N/A	50	D2

OM6108SC	500	0.4	13	8	N/A	125	TO-258AA
OM6104ST	500	1.6	4.5	3	N/A	50	TO-257AA
OM6104SR	500	1.6	4.5	3	N/A	50	D2

Single P-Channel

IRL5NJ7404	-20	0.04	-11	-7	N/A	50	SMD-0.5
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IRF5N4905	-55	0.024	-55	-36	N/A	125	SMD-1
IRF5M4905	-55	0.03	-35	-35	N/A	125	TO-254AA
IRF5NJ5305	-55	0.065	-22	-16	N/A	75	SMD-0.5
IRF5Y5305CM	-55	0.065	-18	-15	N/A	75	TO-257AA

All specifications @ 25°C unless noted

N/A = Not Applicable

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Power MOSFETs

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
Standard							
Single P-Channel (cont.)							
IRFE9024	-60	0.28	-5.4	-3.4	N/A	14	18-pin LCC
IRFF9024	-60	0.28	-6.4	-4.1	N/A	20	TO-205AF
IRF5N5210	-100	0.06	-31	-19	N/A	125	SMD-1
IRF5M5210	-100	0.07	-34	-21	N/A	125	TO-254AA
IRF5NJ9540	-100	0.117	-18	-11	N/A	75	SMD-0.5
IRF5Y9540CM	-100	0.117	-18	-11	N/A	75	TO-257AA
IRFY9140C	-100	0.2	-15.8	-10	N/A	100	TO-257AA
JANS2N7236U	-100	0.2	-18	-11	N/A	125	SMD-1
IRFM9140	-100	0.2	-18	-11	N/A	125	TO-254AA
IRFN9140	-100	0.2	-18	-11	N/A	125	SMD-1
IRFY9140	-100	0.2	-15.8	-10	N/A	100	TO-257AA
IRFY9140CM	-100	0.2	-15.8	-10	N/A	100	TO-257AA
IRFY9140M	-100	0.2	-15.8	-10	N/A	100	TO-257AA
JANS2N7236	-100	0.2	-18	-11	N/A	125	TO-254AA
IRF9140	-100	0.2	-18	-11	N/A	125	TO-204AA
JANTX2N7236U	-100	0.2	-18	-11	N/A	125	SMD-1
JANTX2N7236	-100	0.2	-18	-11	N/A	125	TO-254AA
JANTXV2N7236U	-100	0.2	-18	-11	N/A	125	SMD-1
JANTXV2N7236	-100	0.2	-18	-11	N/A	125	TO-254AA
JANTXV2N6849	-100	0.3	-6.5	-4.1	N/A	25	TO-205AF
JANS2N6849	-100	0.3	-6.5	-4.1	N/A	25	TO-205AF
JANTXV2N6804	-100	0.3	-11	-7	N/A	75	TO-204AA
JANTX2N6849U	-100	0.3	-6.5	-4.1	N/A	25	18-pin LCC
IRFY9130CM	-100	0.3	-11.2	-7.1	N/A	75	TO-257AA
IRF9130	-100	0.3	-11	-7	N/A	75	TO-204AA
IRFE9130	-100	0.3	-6.5	-4.1	N/A	25	18-pin LCC
JANTX2N6804	-100	0.3	-11	-7	N/A	75	TO-204AA
JANTXV2N6849U	-100	0.3	-6.5	-4.1	N/A	25	18-pin LCC
2N6849	-100	0.3	-6.5	-4.1	N/A	25	TO-205AF
2N6804	-100	0.3	-11	-7	N/A	75	TO-204AA
JANTX2N6849	-100	0.3	-6.5	-4.1	N/A	25	TO-205AF
IRFF9130	-100	0.3	-6.5	-4.1	N/A	25	TO-205AF
IRFF9120	-100	0.6	-4	-2.6	N/A	20	TO-205AF
JANTXV2N6845	-100	0.6	-4	-2.6	N/A	20	TO-205AF
JANTXV2N6845U	-100	0.6	-3.5	-2.2	N/A	14	18-pin LCC
2N6845	-100	0.6	-4	-2.6	N/A	20	TO-205AF
IRFE9120	-100	0.6	-3.5	-2.2	N/A	14	18-pin LCC
JANTX2N6845	-100	0.6	-4	-2.6	N/A	20	TO-205AF
JANTX2N6845U	-100	0.6	-3.5	-2.2	N/A	14	18-pin LCC
IRFF9110	-100	1.2	-2.5	-1.6	N/A	15	TO-205AF
IRFE9110	-100	1.2	-2.5	-1.6	N/A	15	18-pin LCC

N/A = Not Applicable

All specifications @ 25°C unless noted

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Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Max Continuous Drain Current I _D @ 100°C (A)	Radiation Level krad (Si)	Max Power Dissipation P _D (W)	Package
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Standard

Single P-Channel (cont.)

IRF5Y6215CM	-150	0.29	-11	-7	N/A	75	TO-257AA
IRF5NJ6215	-150	0.29	-11	-7.2	N/A	75	SMD-0.5
IRF9240	-200	0.5	-11	-7	N/A	125	TO-204AA
IRFN9240	-200	0.51	-11	-7	N/A	125	SMD-1
JANS2N7237U	-200	0.51	-11	-7	N/A	125	SMD-1
JANS2N7237	-200	0.51	-11	-7	N/A	125	TO-254AA
IRFY9240CM	-200	0.51	-9.4	-6	N/A	100	TO-257AA
JANTX2N7237	-200	0.51	-11	-7	N/A	125	TO-254AA
JANTXV2N7237U	-200	0.51	-11	-7	N/A	125	SMD-1
JANTX2N7237U	-200	0.51	-11	-7	N/A	125	SMD-1
JANTXV2N7237	-200	0.51	-11	-7	N/A	125	TO-254AA
IRFM9240	-200	0.51	-11	-7	N/A	125	TO-254AA
JANTX2N6851	-200	0.8	-4	-2.4	N/A	25	TO-205AF
JANTX2N6806	-200	0.8	-6.5	-4	N/A	75	TO-204AA
2N6851	-200	0.8	-4	-2.4	N/A	25	TO-205AF
2N6806	-200	0.8	-6.5	-4	N/A	75	TO-204AA
JANTXV2N6851U	-200	0.8	-4	-2.4	N/A	25	18-pin LCC
IRFE9230	-200	0.8	-4	-2.4	N/A	25	18-pin LCC
IRF9230	-200	0.8	-6.5	-4	N/A	75	TO-204AA
JANTX2N6851	-200	0.8	-4	-2.4	N/A	25	TO-205AF
JANTX2N6851U	-200	0.8	-4	-2.4	N/A	25	18-pin LCC
JANS2N6851	-200	0.8	-4	-2.4	N/A	25	TO-205AF
JANTXV2N6806	-200	0.8	-6.5	-4	N/A	75	TO-204AA
IRFF9230	-200	0.8	-4	-2.4	N/A	25	TO-205AF
JANTX2N6847U	-200	1.5	-2.1	-1.5	N/A	14	18-pin LCC
2N6847	-200	1.5	-2.5	-1.6	N/A	20	TO-205AF
JANTX2N6847	-200	1.5	-2.5	-1.6	N/A	20	TO-205AF
JANTXV2N6847	-200	1.5	-2.5	-1.6	N/A	20	TO-205AF
IRFF9220	-200	1.5	-2.5	-1.6	N/A	20	TO-205AF
JANTXV2N6847U	-200	1.5	-2.1	-1.5	N/A	14	18-pin LCC
IRFE9220	-200	1.5	-2.1	-1.5	N/A	14	18-pin LCC
IRFE9210	-200	3	-1.3	-0.84	N/A	11	18-pin LCC
IRFF9210	-200	3	-1.5	-0.97	N/A	15	TO-205AF

Part Number	Max Breakdown Voltage Drain to Source BV _{DSS} (V)	Resistance Drain to Source R _{DS(on)} (Ω)	Max Continuous Drain Current I _D (A)	Radiation Level krad (Si)	Total Inductance (nH)	Max Forward Voltage @ 25°C @ 45A (V)	Package
Single N-Channel							
IRHSNA57Z60	30	0.0035	75	100	7.03	1.05	SMD-2
IRHSLNA57064	30	0.004	75	100	6.6	0.9	SMD-2
IRHSNA57064	60	0.0056	75	100	7.03	0.9	SMD-2
IRHSLNA57Z60	60	0.0061	75	100	6.5	1.05	SMD-2

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All specifications @ 25°C unless noted

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Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per leg (V)	Max Instantaneous Forward Voltage $V_F @ I_F @ 125^{\circ}C$ (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ (mA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Package
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Schottky Rectifiers

Common Cathode, contact factory for other configurations

16SCYQ030C	30	16	138	0.48(7.5A)	0.33(7.5A)	1	0.8	TO-257AA
30SCLJQ030	30	30	80	0.61	0.55	0.13	1.75	SMD-0.5
35SCGQ030	30	35	108	0.59	0.53	0.4	0.63	TO-254AA
80SCLQ030	30	80	92	0.56	0.55	1.5	0.63	SMD-1

8CLJQ045	45	8.5	100	0.67(4A)	0.58(4A)	0.15	3.73	SMD-0.5
OM4212SM	45	10	100	0.6	0.6	1	3	SMD-3
16SCYQ045C	45	16	134	0.5	0.42	0.4	0.8	TO-257AA
16CYQ045C	45	16	136	0.57	0.49	0.1	0.8	TO-257AA
20CLQ045	45	20	100	0.57	0.48	0.5	1.2	SMD-1
OM4201ST	45	20	100	0.85	0.7	1	2.5	TO-257AA
OM4201SR	45	20	100	0.85	0.7	1	2.5	D2
OM4203SA	45	25	100	0.72	0.64	2	1.7	TO-254AA
OM4203SW	45	25	100	0.72	0.64	2	1.7	D3
30SCLJQ045	45	30	105	0.7	0.69	0.1	1.75	SMD-0.5
30CLJQ045	45	30	87	0.8	0.72	0.08	1.75	SMD-0.5
35SCGQ045	45	35	116	0.54(15A)	0.47(15A)	0.7	0.63	TO-254AA
35CLQ045	45	35	107	0.63(20A)	0.57(20A)	0.5	0.7	SMD-1
35CGQ045	45	35	114	0.68	0.65	0.1	0.7	TO-254AA
22CGQ045	45	35	100	0.75(20A)	0.7(20A)	0.5	0.625	TO-254AA
60CIQ045	45	45	100	0.71(25A)	0.62(25A)	0.8	0.42	TO-259AA
60CKQ045	45	45	100	0.71(25A)	0.62(25A)	0.8	0.42	TO-258AA
80SCLQ045	45	80	84	0.63	0.62	0.6	0.63	SMD-1
OM4204SS	45	100	100	0.75	0.7	1	1.25	S-6

16SCYQ060C	60	16	127	0.58	0.55	0.68	1	TO-257AA
30SCLJQ060	60	30	77	0.9	0.78	0.045	1.75	SMD-0.5
35SCGQ060	60	35	113	0.61	0.61	0.2	0.63	TO-254AA
80SCLQ060	60	80	102	0.68	0.64	0.2	0.63	SMD-1
OM4228SS	60	100	100	0.87	0.8	7	1.7	S-6

15CLQ100	100	15	100	0.67(5A)	0.53(5A)	0.5	1.2	SMD-1
16CYQ100C	100	16	131	0.75	0.63	0.01	1	TO-257AA
16YQ100C	100	16	131	0.95	0.82	0.01	2	TO-257AA
30CLJQ100	100	30	84	1.03	0.77	0.01	1.75	SMD-0.5
35CGQ100	100	35	117	0.79(15A)	0.71(15A)	0.07	0.63	TO-254AA
15CGQ100	100	35	100	0.89(15A)	0.85(15A)	0.5	0.83	TO-254AA
45CIQ100	100	45	100	0.89(25A)	0.74(25A)	0.8	0.42	TO-259AA
45CKQ100	100	45	100	0.89(25A)	0.74(25A)	0.8	0.42	TO-258AA

All specifications @ 25°C unless noted

For Center-Tap, current in both legs

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RECTIFIERS

Rectifiers

Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per leg (V)	Max Instantaneous Forward Voltage $V_F @ I_F @ 125^{\circ}C$ (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ (mA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Package
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Schottky Rectifiers Common Cathode, contact factory for other configurations (cont.)

90CLQ100	100	90	69	0.98(40A)	0.81(40A)	0.02	0.63	SMD-1
OM4229SS	100	100	100	0.97	0.9	7	1.25	S-6

16CYQ150C	150	16	132	0.91	0.73	0.5	0.84	TO-257AA
30CLJQ150	150	30	72	1.2	0.85	0.02	1.75	SMD-0.5
35CGQ150	150	35	115	0.93	0.8	0.1	0.63	TO-254AA
12CGQ150	150	35	100	1.13(15A)	0.86(15A)	0.5	0.83	TO-254AA
12CLQ150	150	35	100	1.13(15A)	0.86(15A)	0.5	0.83	SMD-1
80CLQ150	150	80	94	0.96	0.84	0.5	0.63	SMD-1

Single Device

16SYQ030C	30	16	134	0.55	0.43	1	1.1	TO-257AA
30SLJQ030	30	30	105	0.62	0.57	1	1.6	SMD-0.5
35SGQ030	30	35	100	0.7	0.69	1	1.1	TO-254AA
75SLQ030	30	75	82	0.59	0.51	1	1.1	SMD-1

8EQ045	45	10	100	0.65	0.58	0.5	6	18-pin LCC
10YQ045C	45	10	109	0.73	0.7	0.5	2.6	TO-257AA
10YQ045	45	10	109	0.73	0.7	0.5	2.6	TO-257AA
OM4001ST	45	15	100	0.75	0.725	5	2	T-2
16SYQ045C	45	16	117	0.56	0.52	0.74	1.1	TO-257AA
16YQ045C	45	16	133	0.65	0.61	0.1	1.1	TO-257AA
30LJQ045	45	30	107	0.71	0.66	0.1	1.6	SMD-0.5
30SLJQ045	45	30	97	0.75	0.74	0.4	1.6	SMD-0.5
35SGQ045	45	35	99	0.75	0.79	0.6	1.1	TO-254AA
25GQ045	45	35	100	0.93	0.84	0.8	1	TO-254AA
60LQ045	45	60	105	0.68	0.6	0.8	0.5	SMD-1
75SLQ045	45	75	78	0.64	0.61	1	1.1	SMD-1
120LQ045	45	120	64	0.99	1.07	8	0.8	SMD-1

OM4003ST	60	10	100	0.825	0.725	5	3	T-2
OM4002ST	60	15	100	0.75	0.725	5	2	T-2
16SYQ060C	60	16	125	0.65	0.63	0.5	1.1	TO-257AA
30SLJQ060	60	30	70	0.92	0.96	0.6	2	SMD-0.5
35SGQ060	60	35	79	0.83	0.92	0.2	1.1	TO-254AA
75SLQ060	60	75	74	0.82	0.7	1	1.1	SMD-1

For Center-Tap, current in both legs

All specifications @ 25°C unless noted

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Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per leg (V)	Max Instantaneous Forward Voltage $V_F @ I_F @ 125^{\circ}C$ (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ (mA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Package
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Schottky Rectifiers

Single Device (cont.)

OM4004ST	70	10	100	0.825	0.725	5	3	T-2
OM4005ST	80	10	100	0.825	0.725	5	3	T-2
OM4006ST	90	10	100	0.825	0.725	5	3	T-2

5EQ100	100	8	100	0.8	0.65	0.5	6	18-pin LCC
OM4007ST	100	10	100	0.825	0.725	5	3	T-2
15LJQ100	100	15	100	0.91	0.72	0.5	2.25	SMD-0.5
JANS1N6844US	100	15	100	0.91	0.72	0.5	2.25	SMD-0.5
JANTX1N6844U3	100	15	100	0.91	0.72	0.5	2.25	SMD-0.5
JANTXV1N6844U3	100	15	100	0.91	0.72	0.5	2.25	SMD-0.5
16YQ100C	100	16	132	0.785(15A)	0.71(15A)	0.04	1.1	TO-257AA
30LJQ100	100	30	88	1.04	0.82	0.04	2	SMD-0.5
22GQ100	100	30	100	1.1	0.9	0.8	1	TO-254AA
35GQ100	100	35	91	1.05	1	0.036	1.1	TO-254AA
60LQ100	100	60	102	0.95	0.7	0.8	1.1	SMD-1
120LQ100	100	120	58	0.94	0.74	0.06	0.8	SMD-1

16YQ150C	150	16	124	0.97	0.87	0.1	1.25	TO-257AA
30LJQ150	150	30	84	1.18	0.92	0.12	1.82	SMD-0.5
35GQ150	150	35	100	1	0.9	0.011	1.1	TO-254AA
75LQ150	150	75	108	1.06	0.78	0.1	0.75	SMD-1

RECTIFIERS

Rectifiers

Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per Leg (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ Per Leg (μA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Max Reverse Recovery Time t_{rr} (ns)	Package
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Ultrafast Rectifiers

Common Cathode, contact factory for other configurations

OM5250SM	50	12	100	1	20	2	35	SMD-3
OM5251SM	100	12	100	1	20	2	35	SMD-3
OM5252SM	150	12	100	1	20	2	35	SMD-3
OM5206SC	150	30	100	1.1	20	2	35	TO-258AA
OM5259SC	150	40	100	0.95	20	1.3	50	TO-258AA
OM5253SM	200	12	100	1	20	2	35	SMD-3
OM5216SR	200	16	100	1	10	3.8	35	D2
OM5216ST	200	16	100	1	10	3.8	35	TO-257AA
OM5303SR	200	20	100	1	20	2	35	D2
OM5304ST	200	20	100	1	20	2	35	TO-257AA
OM5303ST	200	20	100	1	20	2	35	TO-257AA
OM100Q20CB	200	100	100	0.97	25	1	50	PB-3A
OM5254SM	300	12	100	1.4	40	1.8	50	SMD-3
OM5255SM	400	12	100	1.4	40	1.8	50	SMD-3
OM5233SR	400	16	100	1.4	20	2.5	50	D2
OM5233ST	400	16	100	1.4	20	2.5	50	TO-257AA
OM5304SR	400	20	100	1	20	2	35	D2
OM5225SW	400	24	100	1.35	20	1.8	50	D3
OM5225SA	400	24	100	1.35	20	1.8	50	TO-254AA
OM100Q50CB	500	100	100	1.2	25	1	75	PB-3A
OM5256SM	600	12	100	1.55	40	1.8	75	SMD-3
OM5234ST	600	16	100	1.55	20	2.5	50	TO-257AA
OM5234SR	600	16	100	1.55	20	2.5	50	D2
OM5226SW	600	24	100	1.35	20	1.8	50	D3
OM5226SA	600	24	100	1.35	20	1.8	50	TO-254AA

RECTIFIERS

For Center-Tap, current in both legs

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Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per Leg (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ Per Leg (μA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Max Reverse Recovery Time t_{rr} (ns)	Package
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Ultrafast Rectifiers

Common Cathode, contact factory for other configurations (cont.)

OM100Q80CB	800	100	100	1.3	25	1	100	PB-3A
OM5261SR	1000	16	100	1.9	35	2.4	65	D2
OM5261ST	1000	16	100	1.9	35	2.4	65	TO-257AA
OM5262SA	1000	24	100	1.9	50	2.4	65	TO-254AA
OM5262SW	1000	24	100	1.9	50	2.4	65	D3

Single Device

OM5001ST	50	15	100	1.1	20	2	35	T-2
OM5002ST	100	15	100	1.1	20	2	35	T-2
OM5003ST	150	15	100	1.1	20	2	35	T-2
OM5004ST	200	15	100	1.1	20	2	35	T-2
OM5005ST	300	15	100	1.35	20	1.8	50	T-2
OM5006ST	400	15	100	1.35	20	1.8	50	T-2
OM5007ST	600	15	100	1.6	20	1.8	50	T-2

Dual

OM5209SC	50	15	100	1.2	20	2	35	MO-078AA
OM5210SC	100	15	100	1.2	20	2	35	MO-078AA

RECTIFIERS

Rectifiers

Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per Leg (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ Per Leg (μA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Max Reverse Recovery Time t_{rr} (ns)	Package
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Ultrafast Rectifiers

Dual (cont.)

OM5211SC	150	15	100	1.2	20	2	35	MO-078AA
OM5212SC	200	15	100	1.2	20	2	35	MO-078AA
OM5213SC	400	15	100	1.45	20	1.8	50	MO-078AA

Soft Recovery Ultrafast Rectifiers

Common Cathode, contact factory for other configurations

HFB16HY20CC	200	16	132	1.15	1	1.49	30	TO-257AA
HFB20HJ20C	200	20	85	1.3	10	4.5	20	SMD-0.5
HFB35HB20C	200	35	108	1.4	50	1.4	35	TO-254AA
HFB50HC20C	200	50	107	1.49	1	0.96	35	TO-258AA
HFB50HI20C	200	50	100	1.54	1	0.96	35	TO-259AA
HFB60HF20C	200	60	50	1.25	10	2.73	35	SMD-1

HFA40HF60C	600	30	100	1.56	10	2	88	SMD-1
HFA35HB60C	600	30	100	1.92	10	2	88	TO-254AA
HFA45HI60C	600	45	100	2	10	1.2	75	TO-259AA
HFA45HC60C	600	45	100	2	10	1.2	75	TO-258AA

HFA40HF120C	1200	15	100	3.3	10	2	100	SMD-1
HFA35HB120C	1200	15	100	4.4	10	2	100	TO-254AA
HFA45HI120C	1200	28	100	3.9	20	1.2	135	TO-259AA
HFA45HC120C	1200	28	100	3.9	20	1.2	135	TO-258AA

Single Device

HFB16HY20C	200	16	120	1.17	1	1.25	42	TO-257AA
HFB25HJ20	200	25	106	1.18	10	1.76	28	SMD-0.5
HFB35HB20	200	35	80	1.15	10	1	35	TO-254AA
HFB50HC20	200	50	87	1.28	0.07	0.75	35	TO-258AA
HFB50HI20	200	50	87	1.28	0.07	0.75	35	TO-259AA
HFB60HF20	200	60	55	1.13	50	1.76	35	SMD-1

For Center-Tap, current in both legs

All specifications @ 25°C unless noted

For data sheets visit our Web site
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D-6

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Part Number	Max Peak Repetitive Reverse Voltage V_{RRM} (V)	Max Avg Rectified Forward Current $I_{F(AV)}$ (A)	Max Case Temperature for $I_{F(AV)}$ T_C (°C)	Max Instantaneous Forward Voltage $V_F @ I_F @ 25^{\circ}C$ Per Leg (V)	Max Instantaneous Reverse Current $I_R @ V_R @ 25^{\circ}C$ Per Leg (μA)	Thermal Resistance Junction to Case $R_{\theta(JC)}$ (°C/W)	Max Reverse Recovery Time t_{rr} (ns)	Package
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Soft Recovery Ultrafast Rectifiers (cont.)

Single Device (cont.)

OM5008ST	400	14	100	1.75	100	2.5	35	T-2
OM5009ST	600	14	100	1.75	100	2.5	35	T-2
HFA35HB60	600	22	100	1.75	10	1.5	90	TO-254AA
HFA40HF60	600	22	100	1.75	10	1.5	90	SMD-1
OM5010ST	800	12	100	2.9	150	2	50	T-2
OM5011ST	1000	12	100	2.9	150	2	50	T-2
HFA35HB120	1200	11	100	3.1	10	1.5	120	TO-254AA
HFA40HF120	1200	11	100	3.1	10	1.5	120	SMD-1

Part Number	Max Collector	Max Collector	Max	Max	Max		Thermal	
	to Emitter	to Emitter	Continuous	Continuous	Continuous	Max	Resistance	
	Breakdown	Saturation	Output	Output	Output	Power	Junction	
	Voltage	Voltage	Current	Current	Current	Dissipation	to Case	
	V _{(BR)CES}	V _{CE(on)}	I _C	I _C @ 90°C	I _C @ 100°C	P _D	R _{θ(JC)}	Package
	(V)	(V)	(A)	(A)	(A)	(W)	(°C/W)	

Single N-Channel

IRG4MC30F	600	1.7	28	—	15	75	1.67	TO-254AA
IRG4MC50F	600	2	35	—	30	150	0.83	TO-254AA
IRG4MC40U	600	2.1	35	—	20	125	1	TO-254AA
IRG4MC50U	600	2.25	35	—	27	150	0.83	TO-254AA

Single N-Channel w/Diode

IRGMIC50U	600	3	45	—	27	200	0.625	TO-259AA
IRGMVC50U	600	3	45	—	27	200	0.625	TO-258AA

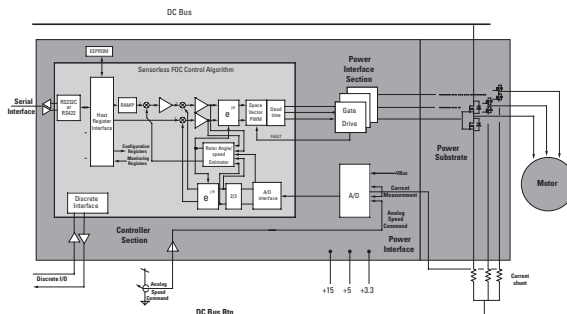
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ONE MODULE DOES IT ALL FOR HIGH-RELIABILITY MOTOR CONTROL

Digital, Analog and Power in a Single Package

Digital Sensorless Speed Controller



IRMCT3UF1 is a fully-integrated high-reliability hybrid motor control module enabling digital, sensorless vector control of permanent magnet motors. The module combines digital control, analog interface and power stage, streamlining time-to-market and increasing design flexibility to accommodate drive system changes in high-reliability applications.

Digital Controller

- Eliminates software development
- Reduces motor commissioning to menu selection using ServoDesigner™ development tool
- IR proprietary vector control algorithm ASIC
- Closed loop sensorless control
- Supports three-phase PMAC/BLDC motors

Analog Interface

- Over-current and under-voltage protection
- Analog speed command
- Start/stop FLT FLTCLEAR commands

Drive

- Integrated gate drive; shoot-through protection

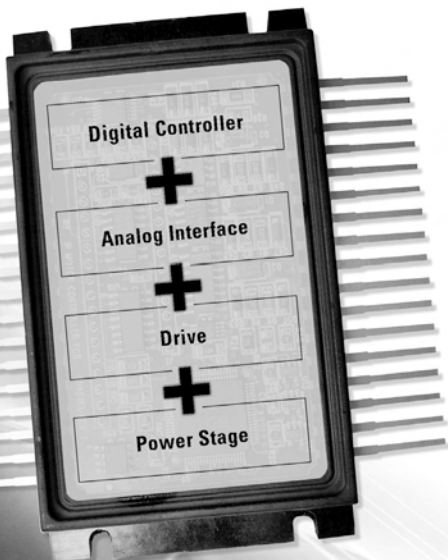
Power Stage

- MOSFET bridge utilizing HEXFET™ technology
- Up to 48V DC bus
- Output current up to 15 Arms continuous – 500 VA Max output

Packaging

- Near hermetic, lightweight
- Plastic frame on an IMS substrate – 2 x 4 x 0.49 inches
- Screened to MIL-STD-883 methods

iMOTION™
Integrated Design Platform



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POWER HYBRIDS FOR MOTOR CONTROL

Standard Products & Custom Solutions for High Reliability Motor Applications



International Rectifier is aligning complex system integration with logic and power component capabilities to bring you cost-effective solutions for motion control designs in commercial and military aircraft, satellites and ground-based military electric vehicles.

Our motion control expertise allows us to create a power hybrid solution for any given motion control circuit in hermetic or plastic packaging. Standard products are rated up to 1200V and 20A while custom products are available at user defined ratings.

Features

- Wide operating temperature range (-55°C to +125°C)
- Fully-integrated control and 3-phase driver stages
- Wide operating voltage range (28VDC to 1200VDC)

The IR Advantage

- Discrete heritage for cost-effective hybrid solutions
- Custom design and application resources
- Unique technology capability to combine surface-mount components with chip and wire processes

See how well our expanding motion control profile fits with your ever-demanding system requirements. Contact your local International Rectifier HiRel representative today.

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Part Number	Max Motor Power Supply Voltage V_M (V)	Floating Gate Supply Voltage V_G (V)	Typical Bus Voltage (V)	Peak Output Current I_O (A)	Average Phase Output Current I_O (A)	Logic Input Voltage V_{CC} (V)	Operating Temperature Min (Junction) T_J (°C)	Operating Temperature Max (Junction) T_J (°C)	Package
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3-Phase Brushless DC Motor Controllers

MOSFET

OMC507	30	—	28	—	5	—	0	85	PCB-1
OMC506	32	—	28	—	15	—	-25	85	MP-3T
OM9371SF	60	—	28	—	25	—	-55	125	F-43
OM9371SP	60	—	28	—	25	—	-40	85	MP3-43L
OM9373SF	100	—	48	—	25	—	-55	125	F-43
OM9373SP	100	—	48	—	25	—	-40	85	MP3-43L
OM9375SF	200	—	74	—	25	—	-55	125	F-43
OM9375SP	200	—	74	—	25	—	-40	85	MP3-43L

IGBT

OM9369SF	500	—	270	—	25	—	-55	125	F-43
OM9369SP	500	—	270	—	25	—	-40	85	MP3-43L

IGBT Gate Drivers

Single Channel

OM9401SF	—	32	—	5	—	5	-55	125	F-12A
OM9402SP	—	25	—	8	—	5	-40	100	SP-10A

All specifications @ 25°C unless noted

Motor Control Modules

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**M
C
M
S**

Part Number	Collector Emitter Voltage V_{CE} (V)	Collector Current I_C (A)	Saturation Voltage $V_{CE\text{ Sat}}$ (V)	Diode Forward Voltage V_F (V)	Package
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IGBT Modules

G450HHBK06P2	600	450	1.8	1.1	HiRel INT-A-Pak 2
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G300HHCK12P2	1200	300	1.8	1.9	HiRel INT-A-Pak 2
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iMOTION

Part Number	Max Motor Power Supply Voltage V_M (V)	Typical Bus Voltage (V)	Average Phase Output Current I_O (A)	Operating Temperature Min (Junction) T_J (°C)	Operating Temperature Max (Junction) T_J (°C)	Package
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Motor Drive Module

IRMCT3UF1	48	28	15	-40	85	MP-3T
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All specifications @ 25°C unless noted

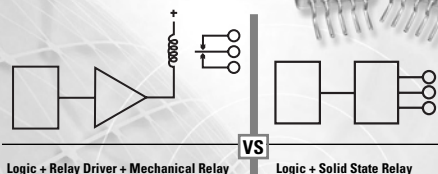
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SIMPLIFY POWER SYSTEM DESIGN WITH COMPACT RAD-HARD SOLID STATE RELAYS

A Highly Reliable Alternative to Electromechanical Relays



For a simple design approach you can count on, switch to IR's radiation-hardened (RAD-Hard™) solid state relays.

Immune to the failure modes experienced by electromechanical devices, our compact RAD-Hard solid state relays provide more reliable on/off switching with lower system part count. These devices use IR's long established RAD-Hard MOSFETs and are designed to survive in high reliability environments.

IR ADVANTAGE:

- Fewer parts:
 - No contact bounce filters required
 - Direct interface to logic
- "Soft" switching reduces RFI/EMI
- SEE rated & TID capable to 100 krad(Si)
- 1,000-volt input to output isolation
- Available in SMD or flange Mount package styles

Contact your local IR HiRel sales representative or go to www.irf.com for data sheets, application notes and radiation reports.

Part Number	Package	Current Rating	Contact Configuration	Input Type	EMI/RFI Control
RDHA710SE10A2Q	8-pin SMD	10A	Dual SPST Normally Open	5V Logic Buffer	Controlled Transition Times
RDHA701FP10ABQ	64-pin SMD	1.5A	Eight SPST Normally Open	5V Logic Buffer	Controlled Transition Times
RDHA701FP10ABC	64-pin SMD	1.5A	Eight SPST Normally Open	No Buffer	Intermediate Transition Times
RDHA720SF06A1N	5-pin SMD	20A	Single SPST Normally Open	No Buffer	Fast Transition Times

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Part Number	Number of Relays Per Package	Output Supply Voltage V _S (V)	Output Current I _O (A)	Response Time	Total Dose (kRad (Si))	Package
RAD-Hard						
RDHA720SF06A1NK	1	60	20	Fast	100	5-Pin SM
RDHA710SE10A2SK	2	100	10	Controlled	100	8-Pin SM
RDHA710SE10A2QK	2	100	10	Controlled	100	8-Pin SM
RDHA710SE10A2FK	2	100	10	Fast	100	8-Pin SM
RDHA701FP10A8QK	8	100	1.5	Controlled	100	64-Pin FlatPack
RDHA701FP10A8CK	8	100	1.5	Intermediate	100	64-Pin FlatPack

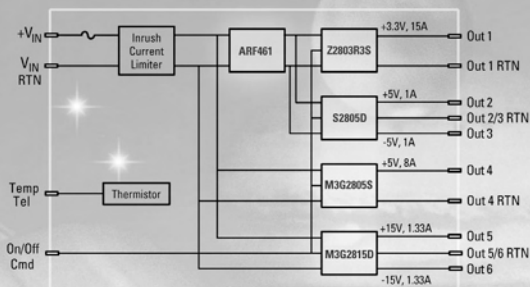
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DC-DC CONVERTERS FOR HIGH EFFICIENCY SPACE APPLICATIONS

Mix and Match Building Blocks For Complete Spacecraft Power System



International Rectifier's off-the-shelf power blocks shorten the design cycle time of power systems used in geosynchronous orbit space vehicles. Z-Series, S-Series and M3G Series DC-DC converters are configurable for multiple output design applications. These building blocks provide design flexibility by satisfying various power and output voltage requirements.

We have applied our time-tested design heritage of high reliability solutions to on-board spacecraft applications in analog and digital electronics. Our 'Z' product line offers the highest efficiency solution for low voltage output applications with its synchronous rectification topology. Compatible EMI filters are also available to meet the conducted emission requirements of MIL-STD-461.

Features

- Multiple power outputs
- Conservative electrical stress de-rating
- High efficiency
- Proven design heritage

Benefits

- System design flexibility
- Lower cost designs
- Reduced cycle time

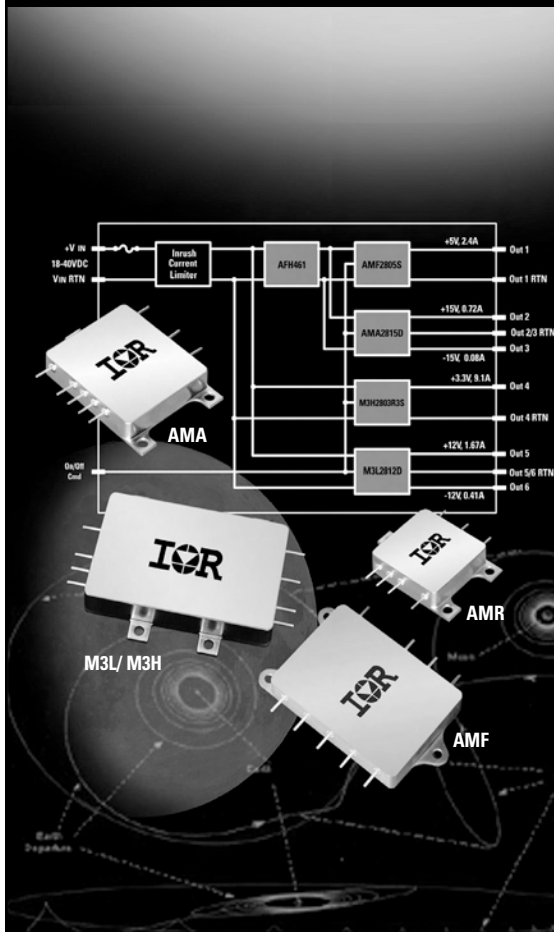
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RAD-TOLERANT DC-DC CONVERTERS FOR SPACE APPLICATIONS

Point of Load Regulated Power for a Complete Spacecraft Power System



International Rectifier AMA, AMF, AMR, M3H, and M3L series DC-DC converter building blocks offer the spacecraft design engineer greater design flexibility in power system configuration at a lower total system cost. These standard off-the-shelf converters are specifically designed for low-earth orbit (LEO) space vehicles, such as data-gathering and weather satellites.

Radiation tolerant converters use IR's time-tested reliability heritage in circuit design topology and performance proven components in the intended radiation environments. Radiation test data, including TID, SEE, are available upon request. Compatible EMI filters are also available to meet the conducted emission requirements of MIL-STD-461.

Features:

- Single, dual, triple - output options
- De-rated per MIL-STD-975 and MIL-STD-1547
- Standard output voltages of 3.3V, 5V, 12V, and 15V
- Operating temperatures of -55°C to 125°C

Benefits:

- Extended operation in moderate radiation environments
- Shorter design cycles
- Greater system design flexibility
- Extensive flight heritage

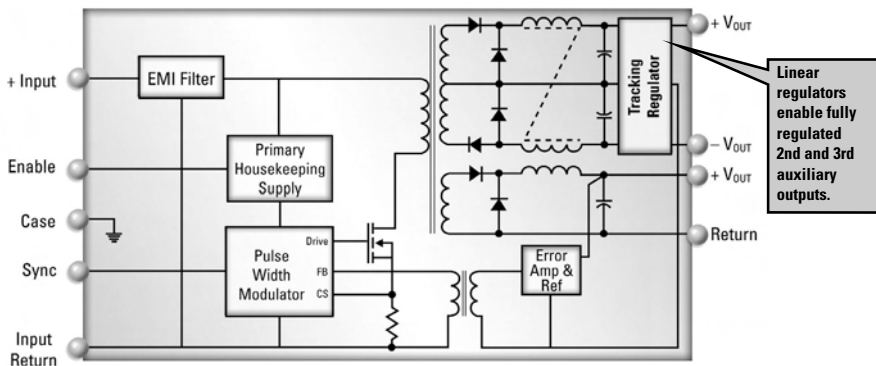
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30W HiREL DC-DC CONVERTER DELIVERS UP TO THREE REGULATED OUTPUTS

With Proven Reliability and Program Heritage



Dimensions (in.)
2.88 x 1.11 x .39



Dimensions (in.)
2.11 x 1.11 x .39

FEATURES

- Compatible with MIL-STD-704 28V input system
- High power density with small form factor
- MIL-STD-461 compliant with a compatible EMI filter
- Input Voltage: 16V to 40V
- Operates at -55°C to +125°C without any de-rating of output power

IR's ATR series of DC-DC converters deliver outstanding reliability track records, program heritage and excellent output regulation performance under extreme load and line conditions, making them the right choice for military and aerospace applications.

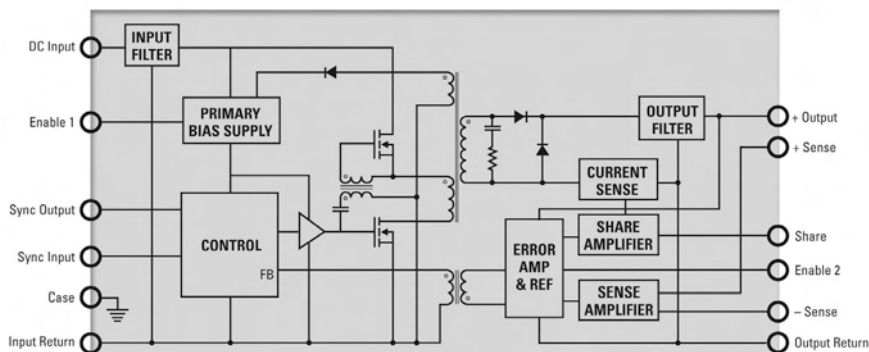
Part Number	Output	Output Voltage (V)	Output Current (A)	DSCC Drawing #
ATR2803R3S	Single	3.3	7.5	—
ATR2805S	Single	5	6	5962-94624
ATR2812S	Single	12	2.5	5962-94625
ATR2815S	Single	15	2	5962-94626
ATR2812D	Dual	±12	±1.25	5962-94627
ATR2815D	Dual	±15	±1	5962-94628
ATR2812T	Triple	5, ±12	3, ±0.625	5962-93158
ATR2815T	Triple	5, ±15	3, ±0.5	5962-92159

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GOOD THINGS DO COME IN SMALL PACKAGES

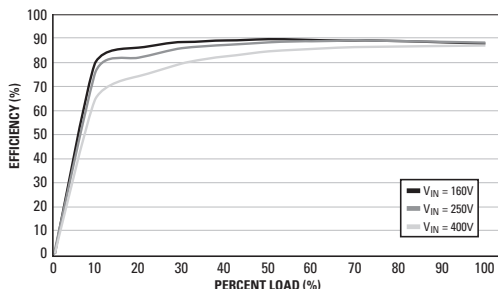
AHP-Series Offers Ruggedness, Performance, and High Power Density for Hi Rel Applications



FEATURES

- Wide operating input range: 160V-400V
- Highest power density in the industry
- Output power up to 120W
- Efficiency as high as 89%
- Fully backward compatible to the AFL-Series

AHP27015S: Efficiency Plot @ $V_{IN} = 160V, 250V$ and $400V, 25^\circ C$



The AHP-Series of 270V input, single and dual DC-DC converters delivers maximum rated power without de-rating over military temperature range of $-55^\circ C$ to $+125^\circ C$. Compared to industry standard, these converters deliver over 20% reduction in component count through higher integration resulting in an improved MTBF. The AHP-series is fully backward compatible to the existing AFL-Series.

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Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
Standard						Single
ATR2803R3S	—	3.3	7.5	16-40	74	ATR
AFL12003R3S	5962-02548	3.3	20	80-160	74	AFL
AFL27003R3S	5962-99553	3.3	20	160-400	74	AFL
AFL2803R3S	5962-99552	3.3	20	16-40	74	AFL
AFL5003R3S	5962-02556	3.3	20	30-80	74	AFL
AHP27003R3S	—	3.3	20	160-400	76	AHP
ASA2805S	5962-94629	5	1	16-40	70	ASA
AHF2805S	5962-91600	5	2.4	16-40	76	AHF
AHE2805S	5962-89683	5	3	17-40	82	AHE
AHV2805S	5962-91773	5	3	16-40	76	AHV
ATR2805S	5962-94624	5	6	16-40	78	ATR
ATW2805S	5962-91579	5	6	19-40	81	ATW
AFL12005S	5962-99608	5	16	80-160	82	AFL
AFL27005S	5962-94569	5	16	160-400	82	AFL
AFL2805S	5962-94721	5	16	16-40	81	AFL
AFL5005S	5962-02557	5	16	30-80	81	AFL
AHP27005S	—	5	16	160-400	82	AHP
AFL27006S	5962-95534	6	13.5	160-400	83	AFL
AHP27006S	—	6	13.5	160-400	83	AHP
AFL27008S	—	8	—	160-400	—	AFL
AFL12008S	5962-02549	8	10	80-160	83	AFL
AFL2808S	5962-96659	8	10	16-40	82	AFL
AFL5008S	5962-02558	8	10	30-80	82	AFL
AFL12009S	5962-02550	9	10	80-160	84	AFL
AFL27009S	5962-95535	9	10	160-400	84	AFL
AFL5009S	5962-02559	9	10	30-80	83	AFL
AHP27009S	—	9	10	160-400	84	AHP
ASA2812S	5962-94631	12	0.417	16-40	74	ASA
AHF2812S	5962-94568	12	1	16-40	78	AHF
AHV2812S	5962-92112	12	1.25	16-40	76	AHV
AHE2812S	5962-91580	12	1.667	17-40	83	AHE

Part Number	DSCC Drawing	Output Voltage V _{OUT} (V)	Output Current I _{OUT} (A)	Input Voltage V _{IN} (V)	Typical Efficiency (%)	Package
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Standard

Single (cont.)

ATR2812S	5962-94625	12	2.5	16-40	80	ATR
ATW2812S	5962-92110	12	2.5	18-40	82	ATW
AFL12012S	5962-02551	12	9	80-160	85	AFL
AFL27012S	5962-94753	12	9	160-400	85	AFL
AFL2812S	5962-94722	12	9	16-40	83	AFL
AFL5012S	5962-02560	12	9	30-80	84	AFL
AHP27012S	—	12	9	160-400	85	AHP

ASA2815S	5962-94630	15	0.333	16-40	74	ASA
AHF2815S	5962-94563	15	0.8	16-40	80	AHF
AHV2815S	5962-92113	15	1	16-40	76	AHV
AHE2815S	5962-91625	15	1.333	17-40	84	AHE
ATR2815S	5962-94626	15	2	16-40	80	ATR
ATW2815S	5962-91599	15	2	17-40	83	ATW
AFL12015S	5962-02552	15	8	80-160	87	AFL
AFL27015S	5962-94570	15	8	160-400	87	AFL
AFL2815S	5962-94723	15	8	16-40	85	AFL
AFL5015S	5962-02561	15	8	30-80	85	AFL
AHP27015S	—	15	8	160-400	87	AHP

AFL12028S	5962-02553	28	4	80-160	85	AFL
AFL27028S	5962-95565	28	4	160-400	85	AFL
AFL2828S	5962-96899	28	4	16-40	84	AFL
AFL5028S	5962-02562	28	4	30-80	84	AFL
AHP27028S	—	28	4	160-400	85	AHP

Dual

AHF2805D	5962-05205	+/-5	+/-1.2	16-40	75	AHF
AFL12005D	5962-02554	+/-5	+/-8	80-160	82	AFL
AFL27005D	5962-95501	+/-5	+/-8	160-400	82	AFL
AFL2805D	5962-95795	+/-5	+/-8	16-40	81	AFL
AFL5005D	5962-02563	+/-5	+/-8	30-80	81	AFL
ASA2805D	—	+/-5	+0.2/+0.8	16-40	70	ASA
AHP27005D	—	+/-5	+/-8	160-400	82	AHP

ASA2812D	5962-95648	+/-12	+/-0.208	16-40	72	ASA
AHF2812D	5962-92111	+/-12	+/-0.5	16-40	77	AHF

N/A = Not Applicable

All specifications @ 25°C unless noted

For data sheets visit our Web site
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Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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Standard

Dual (cont.)

AHE2812D	5962-92040	+/-12	+/-0.625	17-40	82	AHE
AHV2812D	5962-92114	+/-12	+/-0.625	16-40	76	AHV
ATR2812D	5962-94627	+/-12	+/-1.25	16-40	80	ATR
ATW2812D	5962-92109	+/-12	+/-1.25	18-40	83	ATW
AFL12012D	5962-99609	+/-12	+/-4.5	80-160	85	AFL
AFL27012D	5962-99518	+/-12	+/-4.5	160-400	85	AFL
AFL2812D	5962-95796	+/-12	+/-4.5	16-40	84	AFL
AFL5012D	5962-02564	+/-12	+/-4.5	30-80	84	AFL
AHP27012D	—	+/-12	+/-4.5	160-400	85	AHP

ASA2815D	5962-94649	+/-15	+/-0.167	16-40	72	ASA
AHF2815D	5962-92351	+/-15	+/-0.4	16-40	78	AHF
AHE2815D	5962-91575	+/-15	+/-0.5	17-40	82	AHE
AHV2815D	5962-91774	+/-15	+/-0.5	16-40	76	AHV
ATR2815D	5962-94628	+/-15	+/-1	16-40	80	ATR
ATW2815D	5962-91613	+/-15	+/-1	18-40	83	ATW
AFL12015D	5962-02555	+/-15	+/-3.3	80-160	87	AFL
AFL27015D	5962-95532	+/-15	+/-3.3	160-400	87	AFL
AFL2815D	5962-94724	+/-15	+/-3.3	16-40	85	AFL
AFL5015D	5962-02565	+/-15	+/-3.3	30-80	85	AFL
AHP27015D	—	+/-15	+/-3.3	160-400	87	AHP

Triple

AHV2812T	5962-92115	+5, +/-12	2,+/-0.208	16-40	76	AHV
ATO2812T	5962-91602	+5, +/-12	2,+/-0.208	16-40	78	ATO
ATR2812T	5962-93158	+5, +/-12	3,+/-0.625	16-40	76	ATR

AHF2815T	5962-94623	+5, +/-15	1,+/-0.1	16-40	75	AHF
AHV2815T	5962-92116	+5, +/-15	2,+/-0.167	16-40	76	AHV
ATO2815T	5962-90954	+5, +/-15	2,+/-0.167	16-40	78	ATO
ATR2815T	5962-92159	+5, +/-15	3,+/-0.5	16-40	76	ATR

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Tolerant

Single

TID>25K rad(si), SEE>60MeVcm(squared)/mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec

AMA2803R3S	—	3.3	1.2	18-40	63	AMA
AMF2803R3S	—	3.3	3	16-40	72	AMF
AMR2803R3S	5962-04245	3.3	7.5	16-40	74	AMR

AMA2805S	5962-04247	5	1	16-40	66	AMA
AMF2805S	5962-04252	5	2.4	16-40	76	AMF
AMR2805S	5962-04246	5	6	16-40	76	AMR

AMA2812S	5962-04248	12	0.416	16-40	71	AMA
AMF2812S	5962-04253	12	1	16-40	78	AMF
AMR2812S	—	12	2.5	16-40	80	AMR

AMA2815S	5962-04249	15	0.333	16-40	71	AMA
AMF2815S	5962-04254	15	0.8	16-40	78	AMF
AMR2815S	—	15	2	16-40	79	AMR

Dual

AMA2805D	—	+/-5	+/-0.5	16-40	66	AMA
AMF2805D	—	+/-5	+/-1.2	16-40	76	AMF
AMR2805D	—	+/-5	+/-3	16-40	76	AMR

AMA2812D	5962-04250	+/-12	+/-0.208	16-40	71	AMA
AMF2812D	5962-05222	+/-12	+/-0.5	16-40	77	AMF
AMR2812D	—	+/-12	+/-1.25	16-40	80	AMR

AMA2815D	5962-04251	+/-15	+/-0.166	16-40	71	AMA
AMF2815D	5962-05223	+/-15	+/-0.4	16-40	78	AMF
AMR2815D	—	+/-15	+/-1	16-40	79	AMR

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Tolerant (cont.)

Single

TID>25K rad(sil), SEE>37MeVcm(squared)/mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec

M3L2803R3S	—	3.3	6.06	16-50	75	M3L
M3H2803R3S	—	3.3	9.1	18-50	73	M3H

M3L2805S	—	5	5	16-50	79	M3L
M3H2805S	—	5	8	18-50	80	M3H

M3L2805R2S	—	5.2	4.8	16-50	—	M3L
M3H2805R2S	—	5.2	7.69	18-50	80	M3H

M3L2812S	—	12	2.08	16-50	80	M3L
M3H2812S	—	12	3.34	18-50	81	M3H

M3L2815S	—	15	1.67	16-50	81	M3L
M3H2815S	—	15	2.67	18-50	82	M3H

Dual

M3L2805D	—	+/-5	+/-4	16-50	79	M3L
M3H2805D	—	+/-5	+/-6.4	18-50	80	M3H

M3L2812D	—	+/-12	+/-1.67	16-50	79	M3L
M3H2812D	—	+/-12	+/-2.67	18-50	81	M3H

M3L2815D	—	+/-15	+/-1.33	16-50	80	M3L
M3H2815D	—	+/-15	+/-2.14	18-50	82	M3H

Triple

M3H280505T	—	+5, +/-5	4, +/-2	18-50	79	M3H
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Part Number	DSCC Drawing	Output Voltage V _{OUT} (V)	Output Current I _{OUT} (A)	Input Voltage V _{IN} (V)	Typical Efficiency (%)	Package
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RAD-Tolerant (cont.)

Triple (cont.)

TID>25K rad(si), SEE>37MeVcm(squared)/mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec

M3H280515T	—	+5, +/-15	4, +/-0.667	18-50	79	M3H
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M3H280512T	—	+5, +/-12	4, +/-0.833	18-50	79	M3H
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RAD-Hard

Single

TID>100K rad(si), SEE>82MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

LS2801R5S	5962-05238	1.5	8	18-40	64	LS
Z2801R5S	—	1.5	20	22-40	80	Z

LS2802R5S	—	2.5	8	18-40	72	LS
Z2802R5S	—	2.5	20	22-40	85	Z

S2803R3S	5962-04238	3.3	3.03	18-40	77	S
LS2803R3S	5962-05239	3.3	7.57	18-40	76	LS
Z2803R3S	—	3.3	15	22-40	88	Z

S2805S	5962-04239	5	2	18-40	79	S
LS2805S	5962-05240	5	6	18-40	82	LS

S2812S	5962-04240	12	0.83	18-40	81	S
LS2812S	5962-06241	12	2.5	18-40	82	LS

S2815S	5962-04241	15	0.67	18-40	82	S
LS2815S	5962-06242	15	2	18-40	82	LS

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Hard (cont.)

Dual

TID>100K rad(si), SEE>82MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

LS2805D	—	+/-5	+/-4.8	18-40	83	LS
S2805D	5962-04242	+/-5	+/-1.6	18-40	80	S

LS2812D	5962-05241	+/-12	+/-2.3	18-40	83	LS
S2812D	5962-04243	+/-12	+/-0.66	18-40	81	S

LS2815D	5962-05242	+/-15	+/-1.6	18-40	83	LS
S2815D	5962-04244	+/-15	+/-0.54	18-40	82	S

Single

TID>100K rad(si), SEE>83MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

ARH2802R5S	—	2.5	12	18-50	72	ARH
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ARH2803R3S	5962-04233	3.3	9	18-50	75	ARH
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ARH2805S	5962-04232	5	6	18-50	76	ARH
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ARH2805R2S	—	5.2	5.77	18-50	76	ARH
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ARH2812S	—	12	2.5	18-50	80	ARH
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ARH2815S	—	15	2.0	18-50	80	ARH
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DC-DC
CONV

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Hard (cont.)

Triple

TID>100K rad(si), SEE>83MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

ART2812T	5962-04237	+5, +/-12	3, +/-0.625	19-50	83	ART
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ART2815T	5962-04234	+5, +/-15	3, +/-0.5	19-50	83	ART
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Single

TID>200K rad(si), SEE>82MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

M3G2803R3S	5962-03218	3.3	9.1	18-60	72	M3G
M3G5003R3S	—	3.3	9.1	38-60	75	M3G
M3G7003R3S	—	3.3	9.1	60-120	75	M3G

M3G2805S	5962-03219	5	8	18-60	77	M3G
M3G5005S	—	5	8	38-60	81	M3G
M3G7005S	—	5	8	60-120	81	M3G

M3G2805R2S	5962-03220	5.2	7.69	18-60	77	M3G
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M3G2812S	5962-03221	12	3.34	18-60	78	M3G
M3G5012S	—	12	3.34	38-60	82	M3G
M3G7012S	—	12	3.34	60-120	82	M3G

M3G2815S	5962-03222	15	2.67	18-60	80	M3G
M3G5015S	—	15	2.67	38-60	83	M3G
M3G7015S	—	15	2.67	60-120	83	M3G

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Hard (cont.)

Dual

TID>200K rad(si), SEE>82MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

M3G5005D	—	+/-5	+/-6.4	38-60	81	M3G
M3G7005D	—	+/-5	+/-6.4	60-120	81	M3G
M3G2805D	5962-03223	+/-5	1.6/6.4	18-60	78	M3G

M3G2812D	—	+/-12	+/-2.67	18-60	79	M3G
M3G5012D	—	+/-12	+/-2.67	38-60	82	M3G
M3G7012D	—	+/-12	+/-2.67	60-120	82	M3G

M3G2815D	—	+/-15	+/-2.14	18-60	80	M3G
M3G5015D	—	+/-15	+/-2.14	38-60	83	M3G
M3G7015D	—	+/-15	+/-2.14	60-120	83	M3G

Triple

M3G280505T	—	+5, +/-5	4, +/-2	18-60	79	M3G
M3G500505T	—	+5, +/-5	4, +/-2	38-60	—	M3G
M3G700505T	—	+5, +/-5	4, +/-2	60-120	—	M3G

M3G2803R312T	—	+3.3, +/-12	4, +/-0.833	18-60	75	M3G
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M3G280512T	5962-03226	+5, +/-12	4, +/-0.833	18-60	79	M3G
M3G500512T	—	+5, +/-12	4, +/-0.833	38-60	79	M3G
M3G700512T	—	+5, +/-12	4, +/-0.833	60-120	82	M3G

M3G280515T	5962-03227	+5, +/-15	4, +/-0.667	18-60	79	M3G
M3G500515T	—	+5, +/-15	4, +/-0.667	38-60	79	M3G
M3G700515T	—	+5, +/-15	4, +/-0.667	60-120	82	M3G

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Typical Efficiency (%)	Package
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RAD-Hard (cont.)

Triple

TID>1000K rad(si), SEE>83MeVcm(squared)/mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec

ARM2812T	—	+5, +/-12	3, +/-0.5	19-50	80	ARM
ARM2815T	—	+5, +/-15	3, +/-0.5	19-50	80	ARM

DC-DC
CONV

Part Number	Selected Item Drawing	Compatibility	Input Voltage Range V_{IN} (V)	Input Current (A)
EMI Filters				
AFC461	91020	ATW,AHF,AHV,ATR,ATO,AHE,AMF,AMR	40	4
AFH461	—	AMF	80	2
AFM704A	95010	All converters except AFL	40	2.5
AFV461	91020	AHV,ATW,AHF,ATR,ATO,AHE,AMF,AMR	80	4
AME270461	98026	AFL270XX, AFL120XX	40	1.5
AME28461	98027	AFL28XX	50	15
AME50461	—	AFL50XX	100	8
AMH461	—	AHF,ASA,AMA,AMF	40	2.5
ARF461	—	ART,ARH	80	5
ASF461	—	ASA,AHF,AMA,AMF	50	0.42

DC-DC
CONV

All specifications @ 25°C unless noted

N/A = Not Applicable

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Asia: +65 6838 4632

Part Number	DSCC Drawing	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Package
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Fixed Voltage Regulators

3-Terminal Positive

COM7805T	N/A	5	1.5	7.5 to 25	TO-257AA
OM1805NKM	5962-8778201YA	5	1.5	7.5 to 25	TO-204AA
OM1805NMM	5962-8778201NA	5	1.5	7.5 to 25	SMD-1
OM1805NTM	5962-8778201UA	5	1.5	7.5 to 25	TO-257AA
OM1805SRM	5962-87782015A	5	1.5	7.5 to 25	D2
OM1805STM	5962-8778201UA	5	1.5	7.5 to 25	TO-257AA
OM7629NM	5962-8778201NA	5	1.5	7.5 to 25	SMD-1
OM7639SM	N/A	5	1.5	7.5 to 25	SMD-3
OM7805H/AH	5962-8778201TA	5	1.5	7.5 to 25	TO-257AA
OM7805IH/AIH	5962-8778201UA	5	1.5	7.5 to 25	TO-257AA
OM7805SR	5962-87782015A	5	1.5	7.5 to 25	D2

COM7812T	N/A	12	1.5	14.5 to 30	TO-257AA
OM1812NKM	5962-8777601YA	12	1.5	14.5 to 30	TO-204AA
OM1812NMM	5962-8777601NA	12	1.5	14.5 to 30	SMD-1
OM1812NTM	5962-8777601UA	12	1.5	14.5 to 30	TO-257AA
OM1812SRM	5962-87776014A	12	1.5	14.5 to 30	D2
OM1812STM	5962-8777601UA	12	1.5	14.5 to 30	TO-257AA
OM7630NM	5962-8777601NA	12	1.5	14.5 to 30	SMD-1
OM7640SM	N/A	12	1.5	14.5 to 30	SMD-3
OM7812H/AH	5962-8777601TA	12	1.5	14.5 to 30	TO-257AA
OM7812IH/AIH	5962-8777601UA	12	1.5	14.5 to 30	TO-257AA
OM7812SR	5962-87776014A	12	1.5	14.5 to 30	D2

COM7815T	N/A	15	1.5	17.5 to 30	TO-257AA
OM1815NTM	5962-8855301UA	15	1.5	17.5 to 30	TO-257AA
OM7631NM	5962-8855301NA	15	1.5	17.5 to 30	SMD-1
OM7815H/AH	5962-8855301TA	15	1.5	17.5 to 30	TO-257AA
OM7815IH/AIH	5962-8855301UA	15	1.5	17.5 to 30	TO-257AA
OM7815SR	5962-88553014A	15	1.5	17.5 to 30	D2

3-Terminal Negative

OM7608SC	N/A	-5	3	-30 to -7	TO-258AA
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COM7912T	N/A	-12	1.5	-30 to -14.5	TO-257AA
OM1912NKM	5962-8874701YA	-12	1.5	-30 to -14.5	TO-204AA
OM1912NMM	5962-8874701NA	-12	1.5	-30 to -14.5	SMD-1

All specifications @ 25°C unless noted
N/A = Not Applicable

DSCC drawing numbers are pending addition to SMD

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Part Number	DSCC Drawing	Output Voltage	Output Current	Input Voltage	Package
		V _{OUT} (V)	I _{OUT} (A)	V _{IN} (V)	

Fixed Voltage Regulators

3-Terminal Negative (cont.)

OM1912NTM	5962-8874701UA	-12	1.5	-30 to -14.5	TO-257AA
OM1912SRM	5962-88747014A	-12	1.5	-30 to -14.5	D2
OM1912STM	5962-8874701UA	-12	1.5	-30 to -14.5	TO-257AA
OM7633NM	5962-8874701NA	-12	1.5	-30 to -14.5	SMD-1
OM7643SM	N/A	-12	1.5	-30 to -14.5	SMD-3
OM7912H/AH	5962-8874701TA	-12	1.5	-30 to -14.5	TO-257AA
OM7912IH/AIH	5962-8874701UA	-12	1.5	-30 to -14.5	TO-257AA
OM7912SR	5962-88747014A	-12	1.5	-30 to -14.5	D2

OM7610SC	N/A	-15	3	-30 to -17.5	TO-258AA
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Part Number	DSCC Drawing	Adjustable	Output	Input	Package
		Output	Current	Voltage	
		V _{OUT} (V)	I _{OUT} (A)	V _{IN} (V)	

Adjustable Voltage Regulators

3-Terminal Positive

OM3911NTM	5962-8767502TA	1.2 to 33	3	4.25 to 36	TO-257AA
OM1320N2M	77034012A	1.2 to 37	0.5	4.25 to 41.25	LCC-20
OM1324N2M	77034052A	1.2 to 37	0.5	4.25 to 41.25	LCC-20
COM117T	N/A	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM1320NKM	7703401YA	1.2 to 37	1.5	4.25 to 41.25	TO-204AA
OM1320NMM	7703401NA	1.2 to 37	1.5	4.25 to 41.25	SMD-1
OM1320NTM	7703401TA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM1320SMM	7703401MA	1.2 to 37	1.5	4.25 to 41.25	SMD-3
OM1320SRM	77034014A	1.2 to 37	1.5	4.25 to 41.25	D2
OM1320STM	7703401UA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM1324NKM	7703405YA	1.2 to 37	1.5	4.25 to 41.25	TO-204AA
OM1324NMM	7703405NA	1.2 to 37	1.5	4.25 to 41.25	SMD-1
OM1324NTM	7703405TA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM1324SMM	7703405MA	1.2 to 37	1.5	4.25 to 41.25	SMD-3
OM1324SRM	N/A	1.2 to 37	1.5	4.25 to 41.25	D2
OM1324STM	7703405UA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM7602NT	7703401TA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM7602ST	7703401UA	1.2 to 37	1.5	4.25 to 41.25	TO-257AA
OM7626NM	7703401NA	1.2 to 37	1.5	4.25 to 41.25	SMD-1
OM7635SM	7703401MA	1.2 to 37	1.5	4.25 to 41.25	SMD-3

OM1321N2M	77034022A	1.2 to 57	0.5	4.25 to 61.25	LCC-20
OM1326N2M	77034072A	1.2 to 57	0.5	4.25 to 61.25	LCC-20
COM117HVT	N/A	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM1321NKM	7703402YA	1.2 to 57	1.5	4.25 to 61.25	TO-204AA
OM1321NMM	7703402NA	1.2 to 57	1.5	4.25 to 61.25	SMD-1
OM1321NTM	7703402TA	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM1321SMM	7703402MA	1.2 to 57	1.5	4.25 to 61.25	SMD-3
OM1321SRM	77034024A	1.2 to 57	1.5	4.25 to 61.25	D2
OM1321STM	7703402UA	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM1326NKM	7703407YA	1.2 to 57	1.5	4.25 to 61.25	TO-204AA
OM1326NMM	7703407NA	1.2 to 57	1.5	4.25 to 61.25	SMD-1
OM1326NTM	7703407TA	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM1326SMM	7703407MA	1.2 to 57	1.5	4.25 to 61.25	SMD-3
OM1326SRM	77034074A	1.2 to 57	1.5	4.25 to 61.25	D2
OM1326STM	7703407UA	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM7620ST	7703402UA	1.2 to 57	1.5	4.25 to 61.25	TO-257AA
OM7646SM	7703402MA	1.2 to 57	1.5	4.25 to 61.25	SMD-3

REGULATORS

Part Number	DSCC Drawing	Adjustable Output Voltage	Output Current	Input Voltage	Package
		V _{OUT} (V)	I _{OUT} (A)	V _{IN} (V)	

Adjustable Voltage Regulators

3-Terminal Negative

OM3914NKM	5962-8774101XA	-1.2 to -15	3	-36 to -4.25	TO-204AA
OM3914NTM	5962-8774101TA	-1.2 to -15	3	-36 to -4.25	TO-257AA
OM3914SRM	5962-87741014A	-1.2 to -15	3	-36 to -4.25	D2
OM3914STM	5962-8774101UA	-1.2 to -15	3	-36 to -4.25	TO-257AA
OM7611ST	5962-8774101UA	-1.2 to -15	3	-36 to -4.25	TO-257AA

COM137T	N/A	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM1322NKM	7703403YA	-1.2 to -37	1.5	-41.25 to -4.25	TO-204AA
OM1322NMM	7703403NA	-1.2 to -37	1.5	-41.25 to -4.25	SMD-1
OM1322NTM	7703403TA	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM1322SMM	7703403MA	-1.2 to -37	1.5	-41.25 to -4.25	SMD-3
OM1322SRM	77034034A	-1.2 to -37	1.5	-41.25 to -4.25	D2
OM1322STM	7703403UA	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM1325NKM	7703406YA	-1.2 to -37	1.5	-41.25 to -4.25	TO-204AA
OM1325NMM	7703406NA	-1.2 to -37	1.5	-41.25 to -4.25	SMD-1
OM1325NTM	7703406TA	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM1325SMM	7703406MA	-1.2 to -37	1.5	-41.25 to -4.25	SMD-3
OM1325SRM	77034064A	-1.2 to -37	1.5	-41.25 to -4.25	D2
OM1325STM	7703406UA	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM7603ST	7703403UA	-1.2 to -37	1.5	-41.25 to -4.25	TO-257AA
OM7625NM	7703403NA	-1.2 to -37	1.5	-41.25 to -4.25	SMD-1
OM7636SM	N/A	-1.2 to -37	1.5	-41.25 to -4.25	SMD-3

OM1323N2M	77034042A	-1.2 to -47	0.5	-51.25 to -4.25	LCC-20
OM1327N2M	77034082A	-1.2 to -47	0.5	-51.25 to -4.25	LCC-20
OM1323NKM	7703404YA	-1.2 to -47	1.5	-51.25 to -4.25	TO-204AA
OM1323NMM	7703404NA	-1.2 to -47	1.5	-51.25 to -4.25	SMD-1
OM1323NTM	7703404TA	-1.2 to -47	1.5	-51.25 to -4.25	TO-257AA
OM1323SMM	7703404MA	-1.2 to -47	1.5	-51.25 to -4.25	SMD-3
OM1323SRM	77034044A	-1.2 to -47	1.5	-51.25 to -4.25	D2
OM1323STM	7703404UA	-1.2 to -47	1.5	-51.25 to -4.25	TO-257AA
OM1327NKM	7703408YA	-1.2 to -47	1.5	-51.25 to -4.25	TO-204AA
OM1327NMM	7703408NA	-1.2 to -47	1.5	-51.25 to -4.25	SMD-1
OM1327NTM	7703408TA	-1.2 to -47	1.5	-51.25 to -4.25	TO-257AA
OM1327SMM	7703408MA	-1.2 to -47	1.5	-51.25 to -4.25	SMD-3
OM1327SRM	77034084A	-1.2 to -47	1.5	-51.25 to -4.25	D2
OM1327STM	7703408UA	-1.2 to -47	1.5	-51.25 to -4.25	TO-257AA
OM7612ST	7703404UA	-1.2 to -47	1.5	-51.25 to -4.25	TO-257AA

Part Number	DSCC Drawing	Output Voltage	Output Current	Dropout Voltage	Input Voltage	Package
		V _{OUT} (V)	I _{OUT} (A)	V _{DO} (V)	V _{IN} (V)	

Low Dropout Fixed Voltage Regulators

3-Terminal Positive

OM3957NMM	5962-9859001MNA	3.3	1.3	1.5	4.75 to 20	SMD-1
OM3957SMM	5962-9859001MMA	3.3	1.3	1.5	4.75 to 20	SMD-3
OM3957SRM	5962-9859001MTA	3.3	1.3	1.5	4.75 to 20	D2
OM3957STM	5962-9859001MUA	3.3	1.3	1.5	4.75 to 20	TO-257AA
OM7670NM	5962-9859001MNA	3.3	1.3	1.5	4.75 to 20	SMD-1
OM7670SM	5962-9859001MMA	3.3	1.3	1.5	4.75 to 20	SMD-3
OM7670ST	5962-9859001MUA	3.3	1.3	1.5	4.75 to 20	TO-257AA
OM3958NMM	5962-9953101MNA	3.3	2.6	1.5	4.75 to 20	SMD-1
OM3958SMM	5962-9953101MMA	3.3	2.6	1.5	4.75 to 20	SMD-3
OM3958SRM	5962-9953101M4A	3.3	2.6	1.5	4.75 to 20	D2
OM3958STM	5962-9953101MUA	3.3	2.6	1.5	4.75 to 20	TO-257AA
OM7671NK	N/A	3.3	2.6	1.5	4.75 to 20	TO-204AA
OM7671NM	5962-9953101MNA	3.3	2.6	1.5	4.75 to 20	SMD-1
OM7671SM	5962-9953101MMA	3.3	2.6	1.5	4.75 to 20	SMD-3
OM7671ST	5962-9953101MUA	3.3	2.6	1.5	4.75 to 20	TO-257AA

OM2940-5SM	N/A	5	0.5	0.5	8 to 20	LCC-28
OM2940-5SRM	5962-8958701MA	5	1	0.5	8 to 20	D2
OM2940-5STM	5962-8958701UA	5	1	0.5	8 to 20	TO-257AA
OM7648SM	N/A	5	1	0.5	8 to 20	SMD-3
OM186-5SR	N/A	5	1.5	1.5	8 to 20	D2
OM186-5ST	N/A	5	1.5	1.5	8 to 20	TO-257AA
OM185-5ST	N/A	5	3	1.5	8 to 20	TO-257AA
OM184-5SC	N/A	5	5	1.5	8 to 20	TO-258AA
OM183-5SC	N/A	5	7.5	1.5	8 to 20	TO-258AA

OM2940-12SRM	5962-9088401MMA	12	1	0.5	14.75 to 26	D2
OM2940-12STM	5962-9088401MUA	12	1	0.5	14.75 to 26	TO-257AA
OM186-12ST	N/A	12	1.5	1.5	14.75 to 25	TO-257AA
OM185-12ST	N/A	12	3	1.5	14.75 to 25	TO-257AA

OM185-15ST	N/A	15	1	1.5	17.75 to 25	TO-257AA
OM2940-15SRM	5962-9088501MMA	15	1	0.5	17.75 to 26	D2
OM2940-15STM	5962-9088501MUA	15	1	0.5	17.75 to 26	TO-257AA
OM186-15ST	N/A	15	1.5	1.5	17.75 to 25	TO-257AA
OM183-15SC	N/A	15	7.5	1.5	17.75 to 25	TO-258AA

Part Number	DSCC Drawing	Output Voltage	Output Current	Dropout Voltage	Input Voltage	Package
		V _{OUT} (V)	I _{OUT} (A)	V _{DO} (V)	V _{IN} (V)	

Low Dropout Fixed Voltage Regulators

3-Terminal Negative

OM2990-5SR	N/A	-5	0.3	0.6	-26 to 0.3	D2
OM2990-5STM	5962-9571101MUA	-5	0.3	0.6	-26 to 0.3	TO-257AA
OM2990-12SRM	5962-9751001MMA	-12	0.3	0.6	-26 to 0.3	D2
OM2990-12STM	5962-9571001MUA	-12	0.3	0.6	-26 to 0.3	TO-257AA
OM2990-15SRM	5962-9570901M4A	-15	0.3	0.6	-26 to 0.3	D2
OM2990-15STM	5962-9570901MUA	-15	0.3	0.6	-26 to 0.3	TO-257AA

Part Number	DSCC Drawing	Adjustable	Output	Output	Dropout	Input	Package
		Voltage	Current	Voltage	Voltage		
		V _{OUT} (V)	I _{OUT} (A)	V _{DO} (V)	V _{IN} (V)		
Low Dropout Adjustable Voltage Regulators							3-Terminal Positive
OM7581SC	5962-0323702MZA	1.8 to 5.5	10	0.66	6 to 13	C-6	
OM7581SM	5962-0323702MXA	1.8 to 5.5	10	0.66	6 to 13	SMD-6C	
OM71587ST	N/A	2.5 to 3.6	3	1.2	3.9 to 7	TO-257AA	
OM71585ST	N/A	2.5 to 3.6	4.5	1.2	3.9 to 7	TO-257AA	
OM71584SR	N/A	2.5 to 3.6	7	1.2	3.9 to 7	D2	
OM71584ST	N/A	2.5 to 3.6	7	1.2	3.9 to 7	TO-257AA	
OM1860NHM	5962-8998101YA	3.3 to 15	1.5	1.5	5 to 25	TO-39	
OM1860NKM	5962-8998101XA	3.3 to 15	1.5	1.5	5 to 25	TO-204AA	
OM1860SRM	5962-8998101MA	3.3 to 15	1.5	1.5	5 to 25	D2	
OM1860STM	5962-8998101UA	3.3 to 15	1.5	1.5	5 to 25	TO-257AA	
OM186SR	5962-8998101MA	3.3 to 15	1.5	1.5	5 to 25	D2	
OM186ST	5962-8998101UA	3.3 to 15	1.5	1.5	5 to 25	TO-257AA	
OM7624NM	N/A	3.3 to 15	1.5	1.5	5 to 25	SMD-1	
OM1850NKM	5962-8864601XA	3.3 to 15	3	1.5	5 to 25	TO-204AA	
OM1850SRM	5962-8864601MA	3.3 to 15	3	1.5	5 to 25	D2	
OM1850STM	5962-8864601UA	3.3 to 15	3	1.5	5 to 25	TO-257AA	
OM185SR	5962-8864601MA	3.3 to 15	3	1.5	5 to 25	D2	
OM185ST	5962-8864601UA	3.3 to 15	3	1.5	5 to 25	TO-257AA	
OM7623NM	N/A	3.3 to 15	3	1.5	5 to 25	SMD-1	
OM1840NCM	5962-8952101ZA	3.3 to 15	5	1.5	5 to 25	TO-258AA	
OM1840NKM	5962-8952101XA	3.3 to 15	5	1.5	5 to 25	TO-204AA	
OM1840SCM	5962-8952101YA	3.3 to 15	5	1.5	5 to 25	TO-258AA	
OM7622NM	N/A	3.3 to 15	5	1.5	5 to 25	SMD-1	
OM1830NCM	5962-8952001ZA	3.3 to 15	7.5	1.5	5 to 25	TO-258AA	
OM1830SCM	5962-8952001YA	3.3 to 15	7.5	1.5	5 to 25	TO-258AA	
OM183SC	5962-8952001YA	3.3 to 15	7.5	1.5	5 to 25	TO-258AA	
OM7621NM	N/A	3.3 to 15	7.5	1.5	5 to 25	SMD-1	

All specifications @ 25°C unless noted
N/A = Not Applicable

DSCC drawing numbers are pending addition to SMD

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Part Number	DSCC Drawing	Output Voltage	Output Current	Input Voltage	Dropout Voltage	Package
		V _{OUT} (V)	I _{OUT} (A)	V _{IN} (V)	V _{DO} (V)	

Ultra Low Dropout Positive Adjustable Linear Regulators

OM7764ASC	5962-0323801MYA	1.2 to 20	3	2.3 to 20	0.4	MO-078AA
OM7764ASM	5962-0323801MXA	1.2 to 20	3	2.3 to 20	0.4	SMD-6
OM7580SC	5962-0323701MYA	1.5 to 5.5	7	6 to 13	0.54	MO-078AA
OM7580SM	5962-0323701MXA	1.5 to 5.5	7	6 to 13	0.54	SMD-6

Part Number	DSCC Drawing	Output Voltage	Output Current	Input Voltage	Package
		Die 1 / Die 2			
		V _{OUT} (V)	I _{OUT} (A)	V _{IN} (V)	

Dual Fixed Voltage Regulators

OM7516SM	N/A	-12 / 12	1	-25 to 25	SMD-6
OM7505SC	5962-8949006X	-12 / 12	1.5	-30 to 25	MO-078AA
OM7505SM	N/A	-12 / 12	1.5	-30 to 25	SMD-6

Part Number	Output Voltage V_{OUT} (V)	Output Current I_{OUT} (A)	Input Voltage V_{IN} (V)	Dropout Voltage V_{DO} (V)	Radiation Level krad (Si)	Package
1000K Rad (Si) per MIL-STD-883, Method 1019, Condition A						
RAD-Hard Ultra Low Dropout Positive Fixed Linear Regulator						
IRUH33P183A1M	1.8	3	2.9 to 6.5	1.1	1000	8-Lead Flat Pak
IRUH33P183B1M	1.8	3	2.9 to 6.5	1.1	1000	MO-078AA
IRUH33P253A1M	2.5	3	2.9 to 6.5	0.4	1000	8-Lead Flat Pak
IRUH33P253B1M	2.5	3	2.9 to 6.5	0.4	1000	MO-078AA
IRUH50P253A1M	2.5	3	4.5 to 6.5	0.4	1000	8-Lead Flat Pak
IRUH50P253B1M	2.5	3	4.5 to 6.5	0.4	1000	MO-078AA
IRUH50P333A1M	3.3	3	4.5 to 6.5	0.4	1000	8-Lead Flat Pak
IRUH50P333B1M	3.3	3	4.5 to 6.5	0.4	1000	MO-078AA
IRUH33PA13A1M	1.265 to 6.1	3	2.9 to 6.5	0.4	1000	8-Lead Flat Pak
IRUH33PA13B1M	1.265 to 6.1	3	2.9 to 6.5	0.4	1000	MO-078AA
IRUH50PA23A1M	1.265 to 6.1	3	4.5 to 6.5	0.4	1000	8-Lead Flat Pak
IRUH50PA23B1M	1.265 to 6.1	3	4.5 to 6.5	0.4	1000	MO-078AA

200K Rad (Si) per MIL-STD-883, Method 1019, Condition A

IRUH33PA13B20	1.265 to 6.1	3	2.9 to 6.5	0.4	200	MO-078AA
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Part Number	Max Offset	Supply Voltage	Input Voltage	Output Current	Special Features	Radiation Level krad (Si)	Circuit	Package
	Supply							
	V _S (V)	V _{CC} (V)	I _{OUT} (A)					

Standard

IR2130D	400	10 to 20	0.2/0.42	Current Sensing and UVLD	N/A	3PH Bridge Driver	MO-038AB
IR2110L4	400	10 to 20	2/2	Delay Matching	N/A	HI & LO MOS Drivers	MO-036AB
IR2110E4	400	10 to 20	2/2	Delay Matching	N/A	HI & LO MOS Drivers	18-pin LCC
IR2125Z	400	12 to 18	1/2	Current Limiting	N/A	High Side Driver	MO-036AA

IR2153Z	600	10 to 20	0.2/0.4	Self Oscillating	N/A	Half-Bridge Driver	MO-036AA
IR2113L6	600	10 to 20	2/2	Delay Matching	N/A	HI & LO MOS Drivers	MO-036AB
IR2113E6	600	10 to 20	2/2	Delay Matching	N/A	HI & LO MOS Drivers	18-pin LCC

RAD-Hard

RIC7113A4	400	10 to 20	2/2	Delay Matching	100	HI & LO MOS Drivers	14-Lead FlatPak
RIC7113E4	400	10 to 20	2/2	Delay Matching	100	HI & LO MOS Drivers	18-pin LCC
RIC7113L4	400	10 to 20	2/2	Delay Matching	100	HI & LO MOS Drivers	MO-036AB

All specifications @ 25°C unless noted

N/A = Not Applicable

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Package Capabilities

The following illustrations represent a sampling of Aerospace and Defense Products package offerings. In addition to industry standard packages, custom packaging solutions to meet applicationspecific requirements are also available.

Custom Packaging



Multi-Chip Modules



PB-3A
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8-Lead Flat Pack
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SP-10A
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M-12
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F-12A Z-tab
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MP-3T
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MP-43L
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HiRel INT-A-Pak2
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64 Pin Flatpack
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5 Pin SMT
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8 Pin SMT
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Through-hole Packages



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C-5 (MO-078AA)
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C-6
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S-6
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TO-254AA
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TO-254AA Tabless
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TO-257AA
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TO-257AA Tabless
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T-2 (2-Lead TO-257)
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Through-hole Packages



TO-258AA
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TO-259AA
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D-12 (12-Lead TO-254)
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MO-036AA
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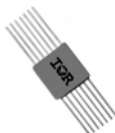
MO-036AB
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MO-038AB
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14-Lead Flat Pack
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F-14L
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TO-204AA/AE
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TO-3-8 (8-Lead TO-204)
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TO-205AF
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PACKAGES

Surface Mount Packages



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SMD-6, 6-Lead SM TO-257
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SMD-6C, 6-Lead SM TO-257
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SMD-3, 3-Lead SM TO-257
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SMD-0.5
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SMD-0.5 with Leads
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SMD-1
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SMD-1 with Leads
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SMD-1 on Carrier
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SMD-2
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SMD-2 with Leads
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SMD-2 on Carrier
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SMD-3
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Surface Mount Packages



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LCC-20
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LCC-28
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DC-DC Converters



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ASF
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AHF
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AMA
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AMF
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AMH
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S Series
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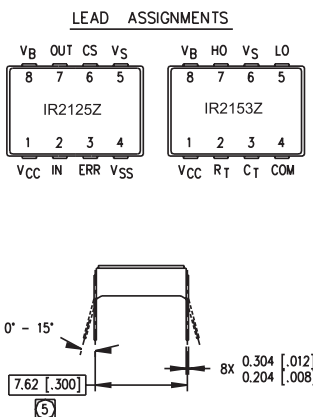
Z Series
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M3G-M3H
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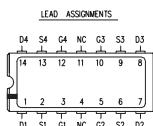


M3L-LS-ATS
See Page K-51

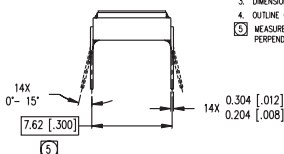


1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. OUTLINE CONFORMS TO JEDEC OUTLINE MO-036AB.

PACKAGES

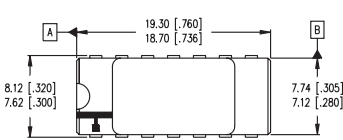


G = GATE S = SOURCE
D = DRAIN NC = NO CONNECTION

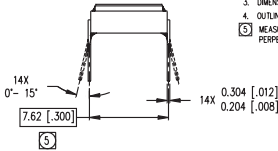
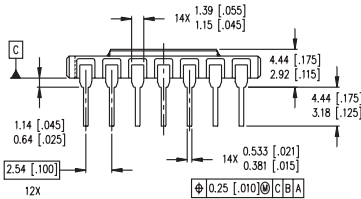
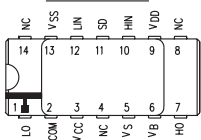


1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. OUTLINE CONFORMS TO JEDEC OUTLINE MO-036AB.
5. MEASURED WITH THE LEADS CONSTRAINED TO BE PERPENDICULAR TO DATUM PLANE C.

Asia: +65 6838 4632



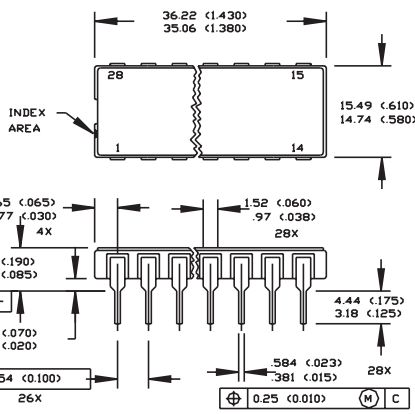
LEAD ASSIGNMENTS



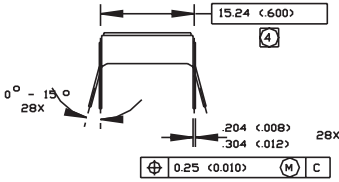
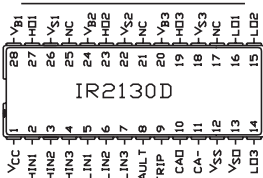
- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
 4. OUTLINE CONFORMS TO JEDEC OUTLINE MO-036AB.
 5. MEASURED WITH THE LEADS CONSTRAINED TO BE PERPENDICULAR TO DATUM PLANE C.

Case style MO-036AB (CIC)

PACKAGES



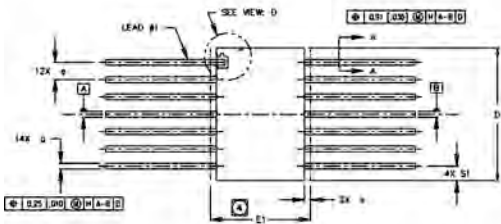
PINOUT ASSIGNMENT



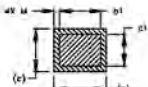
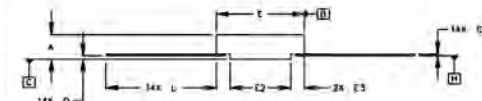
- NOTES:
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION : INCH.

3. DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
4. DIMENSION IS TO CENTER OF LEADS WHEN FORMED PARALLEL.
5. OUTLINE CONFORMS TO JEDEC OUTLINE MO-038AB.

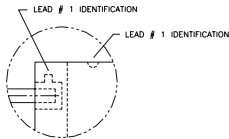
Case style MO-038AB



DIMENSIONS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.14	2.92	.045	.115
B	0.56	0.56	.015	.022
B1	0.56	0.48	.015	.019
C	0.10	0.25	.004	.009
D	0.10	0.15	.004	.006
E	---	0.91	---	.350
F	5.97	6.60	.235	.260
G	---	7.37	---	.290
H	3.16	---	.125	---
I	0.76	---	.030	---
J	1.27	6.35	.050	.250
K	0.20	0.38	.008	.015
L	6.86	9.40	.270	.370
M	0.18	0.33	.007	.013
N	0.15	---	.005	---
O	---	0.04	---	.0015

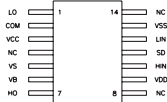


- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
 4. THIS DIMENSION ALLOWS FOR OFF-CENTER LID, MENISCUS AND GLASS OVERFILL.
 5. OUTLINE CONFORMS TO MIL-STD-1835C, OUTLINE CDFP3-F14 EXCEPT FOR DIMENSION Q.

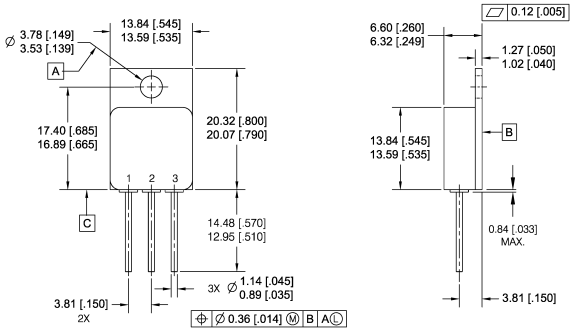


VIEW D
LOCATION OF LEAD #1 IDENTIFICATION MARKS

LEAD ASSIGNMENT



Case style 14-Lead Flat Pack

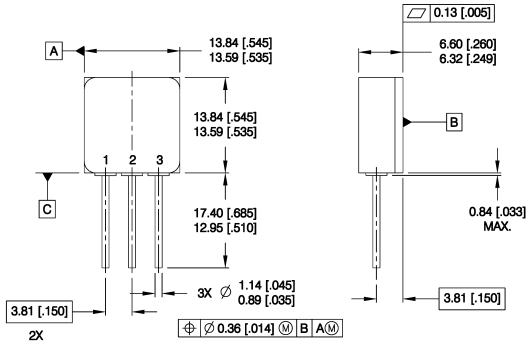


- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
 2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
 3. CONTROLLING DIMENSION: INCH.
 4. CONFORMS TO JEDEC OUTLINE TO-254AA.

PIN ASSIGNMENTS

- 1 = DRAIN
2 = SOURCE
3 = GATE

Case style TO-254AA (Standard & Low Ohmic)



PIN ASSIGNMENTS

MOSFET

- 1 = DRAIN
2 = SOURCE
3 = GATE

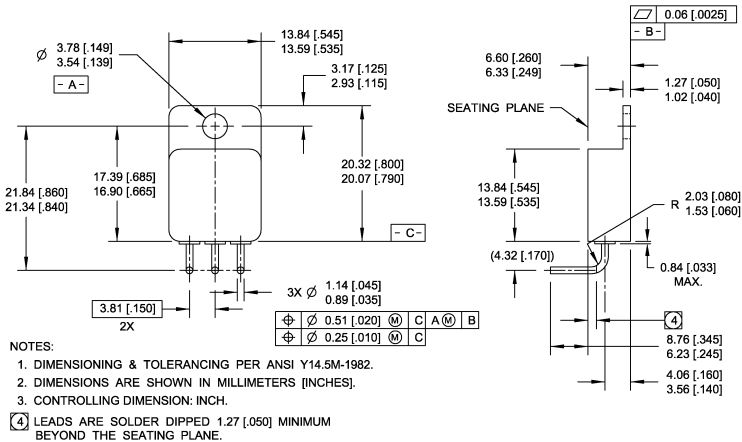
SCHOTTKY SINGLE DIE

- 1 = CATHODE
2 = NO CONNECTION
3 = ANODE

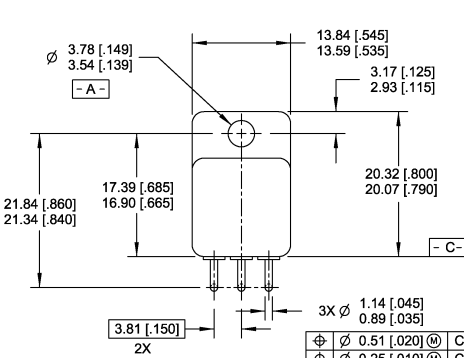
SCHOTTKY DUAL DIE

- 1 = ANODE 1
2 = COMMON CATHODE
3 = ANODE 2

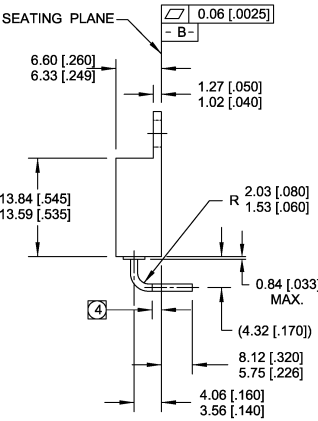
Case style TO-254AA (Tabless Standard & Low Ohmic)



Case style TO-254AA (Lead Form Up)



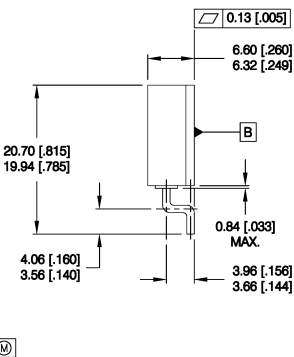
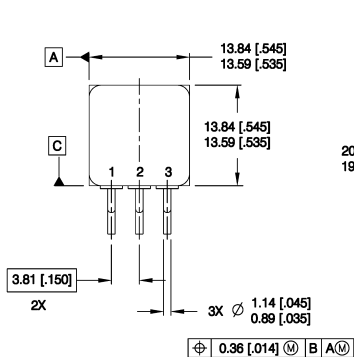
- NOTES:
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
 2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
 3. CONTROLLING DIMENSION: INCH.
 4. LEADS ARE SOLDER DIPPED 1.27 [050] MINIMUM BEYOND THE SEATING PLANE.



ϕ	0.51	[020]	M	C	A	M	B
ϕ	0.25	[010]	M	C			

PACKAGES

Case style TO-254AA (Lead Form Down)



ϕ	0.36	[014]	M	B	A	M
--------	------	-------	---	---	---	---

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. THIS OUTLINE IS A MODIFIED TO-254AA JEDEC OUTLINE.
5. AVAILABLE WITH EITHER GLASS OR CERAMIC SEALS.

PIN ASSIGNMENTS

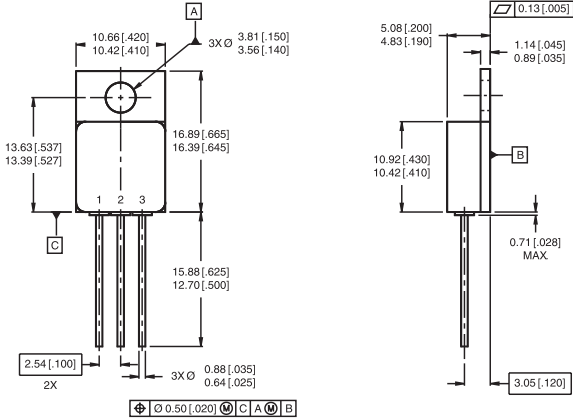
MOSFET	SCHOTTKY SINGLE DIE	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = ANODE 1
2 = SOURCE	2 = NO CONNECTION	2 = COMMON CATHODE
3 = GATE	3 = ANODE	3 = ANODE 2

Case style D3

For data sheets visit our Web site at
www.irf.com

K-8

Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632



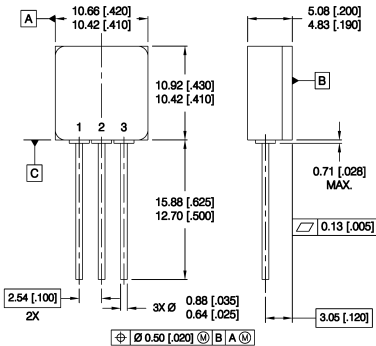
NOTES:

1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. OUTLINE CONFORMS TO JEDEC OUTLINE TO-257AA.

PIN ASSIGNMENTS

CERAMIC EYELETS		CERAMIC EYELETS		GLASS EYELETS		GLASS EYELETS	
IRFY ____CM		IRFY ____C		IRFY ____M		IRFY ____	
MOSFET	SCHOTTKY SINGLE DIE	MOSFET	SCHOTTKY DUAL DIE	MOSFET	SCHOTTKY SINGLE DIE	MOSFET	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = GATE	1 = ANODE 1	1 = DRAIN	1 = CATHODE	1 = GATE	1 = ANODE 1
2 = SOURCE	2 = NO CONNECTION	2 = DRAIN	2 = COMMON CATHODE	2 = SOURCE	2 = NO CONNECTION	2 = DRAIN	2 = COMMON CATHODE
3 = GATE	3 = ANODE	3 = SOURCE	3 = ANODE 2	3 = GATE	3 = ANODE	3 = SOURCE	3 = ANODE 2

Case style TO-257AA (Standard & Low Ohmic)



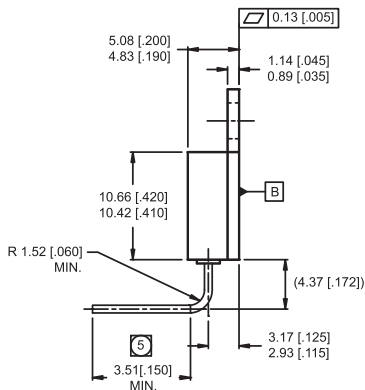
NOTES:

1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. TO-257AA TABLESS IS A MODIFIED JEDEC OUTLINE TO-257AA.
5. AVAILABLE WITH EITHER GLASS OR CERAMIC SEALS.

PIN ASSIGNMENTS

CERAMIC EYELETS		CERAMIC EYELETS		GLASS EYELETS		GLASS EYELETS	
IRFY ____CM		IRFY ____C		IRFY ____M		IRFY ____	
MOSFET	SCHOTTKY SINGLE DIE	MOSFET	SCHOTTKY DUAL DIE	MOSFET	SCHOTTKY SINGLE DIE	MOSFET	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = GATE	1 = ANODE 1	1 = DRAIN	1 = CATHODE	1 = GATE	1 = ANODE 1
2 = SOURCE	2 = NO CONNECTION	2 = DRAIN	2 = COMMON CATHODE	2 = SOURCE	2 = NO CONNECTION	2 = DRAIN	2 = COMMON CATHODE
3 = GATE	3 = ANODE	3 = SOURCE	3 = ANODE 2	3 = GATE	3 = ANODE	3 = SOURCE	3 = ANODE 2

Case style TO-257AA (Tabless Standard & Low Ohmic)



PIN ASSIGNMENTS

- 1 = DRAIN
2 = SOURCE
3 = GATE

5 LEADS ARE SOLDER DIPPED TO THIS DIMENSION.

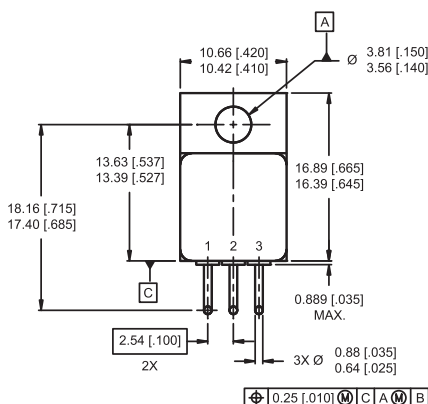
PACKAGES

[illegible]

PIN ASSIGNMENTS

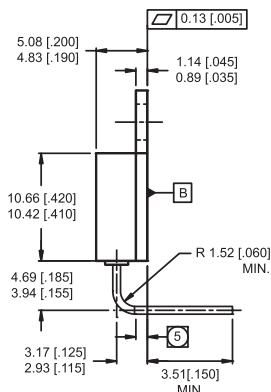
- 1 = GATE
2 = DRAIN
3 = SOURCE

Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632



NOTES:

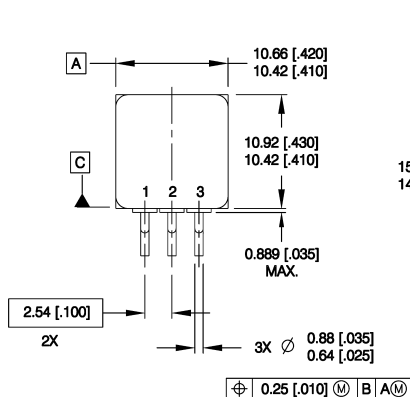
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. THIS OUTLINE IS A MODIFIED TO-257AA JEDEC OUTLINE.
5. LEADS ARE SOLDER DIPPED 1.27 [0.050] MIN. BEYOND THE SEATING PLANE.



PIN ASSIGNMENTS

- 1 = DRAIN
2 = SOURCE
3 = GATE

Case style TO-257AA (Lead Form Down)

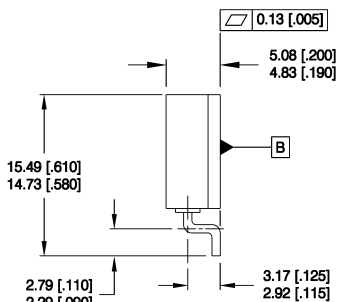


NOTES:

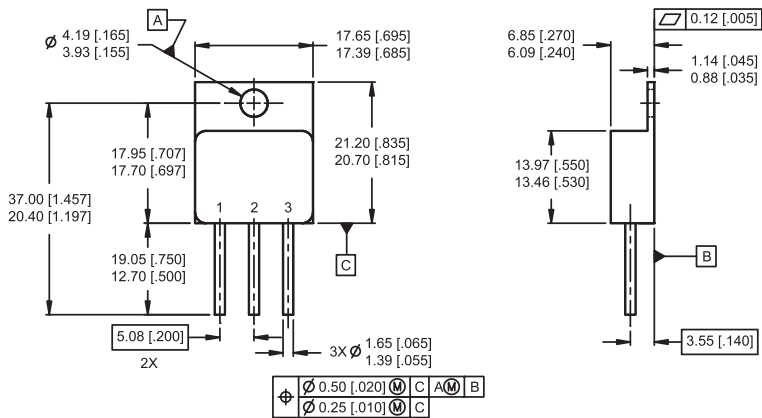
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES]
3. CONTROLLING DIMENSION: INCH.
4. THIS OUTLINE IS A MODIFIED TO-257AA JEDEC OUTLINE.
5. AVAILABLE WITH EITHER GLASS OR CERAMIC SEALS.

PIN ASSIGNMENTS

MOSFET	SCHOTTKY SINGLE DIE	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = ANODE 1
2 = SOURCE	2 = NO CONNECTION	2 = COMMON CATHODE
3 = GATE	3 = ANODE	3 = ANODE 2



Case style D2



NOTES:

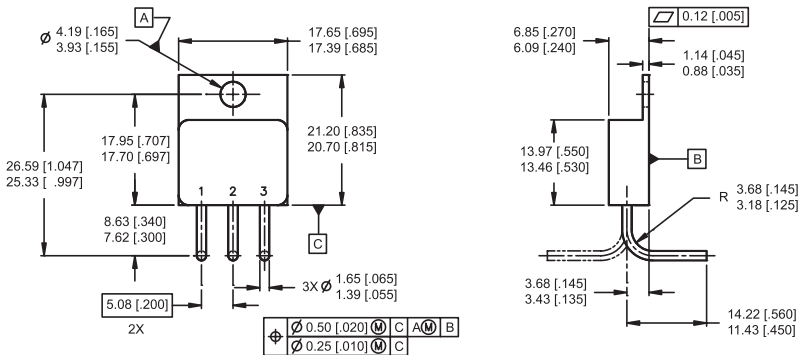
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. CONFORMS TO JEDEC OUTLINE TO-258AA.

PIN ASSIGNMENTS

- 1 = DRAIN
2 = SOURCE
3 = GATE

Case style TO-258AA

PACKAGES



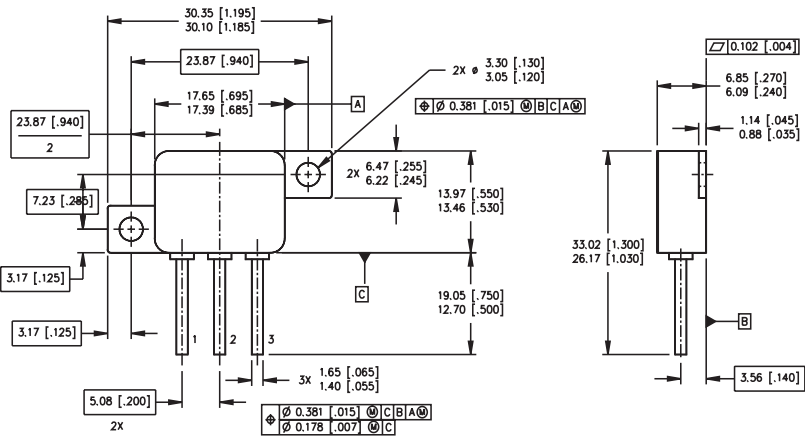
NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. CONFORMS TO JEDEC OUTLINE TO-258AA BEFORE LEADFORMING.

PIN ASSIGNMENTS

- 1 = DRAIN
2 = SOURCE
3 = GATE

Case style TO-258AA (Lead Form)

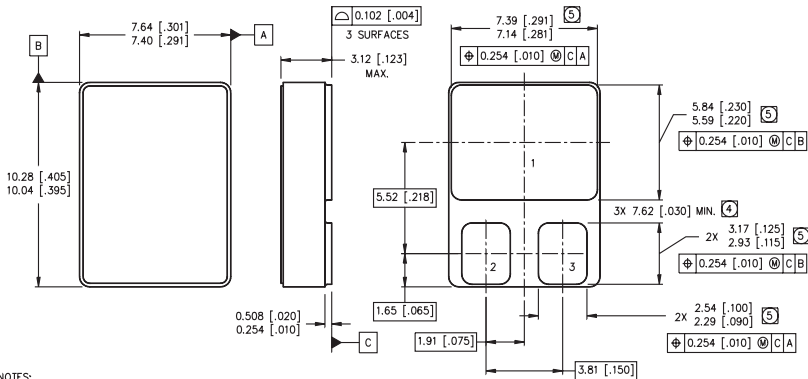


NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME 14.5M-1994.
2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH
4. CONFORMS TO JEDEC OUTLINE TO-259AA.

Case style TO-259AA

PACKAGES



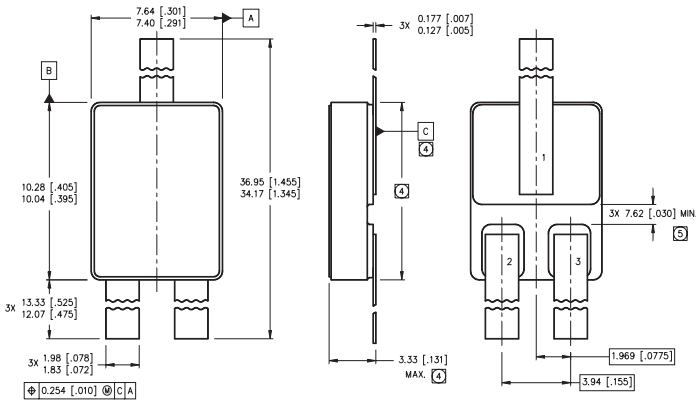
NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. DIMENSION INCLUDES METALLIZATION FLASH.
5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

PAD ASSIGNMENTS

MOSFET	SCHOTTKY SINGLE DIE	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = CATHODE
2 = GATE	2 = COMMON ANODE	2 = ANODE 1
3 = SOURCE	3 = COMMON ANODE	3 = ANODE 2

Case style SMD-0.5

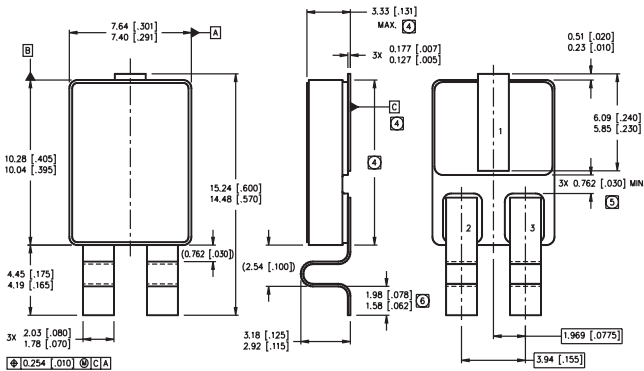


- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES]
 4. DATUM PLANE C & MAX. HEIGHT DIMENSION ARE MEASURED WITHIN THIS AREA.
 5. DIMENSION INCLUDES METALLIZATION FLASH.

LEAD ASSIGNMENTS

MOSFET	SCHOTTKY SINGLE DIE	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = CATHODE
2 = GATE	2 = COMMON ANODE	2 = ANODE 1
3 = SOURCE	3 = COMMON ANODE	3 = ANODE 2

Case style SMD-0.5 (With Leads)

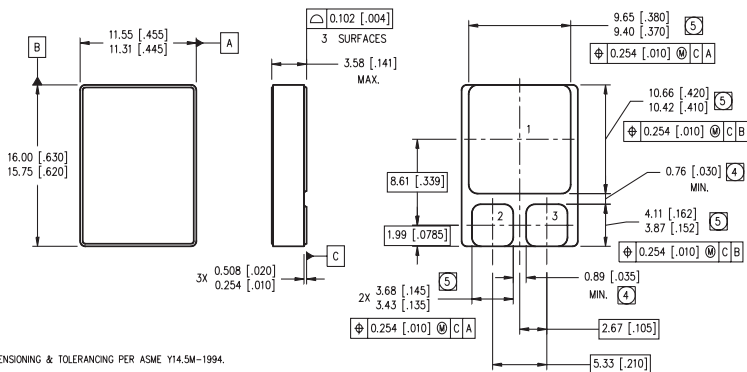


- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES]
 4. DATUM PLANE C & MAX. HEIGHT DIMENSION ARE MEASURED WITHIN THIS AREA.
 5. DIMENSION INCLUDES METALLIZATION FLASH.
 6. DIMENSION IS LENGTH OF LEAD FOR SOLDERING TO A SUBSTRATE.

LEAD ASSIGNMENTS

MOSFET	SCHOTTKY SINGLE DIE	SCHOTTKY DUAL DIE
1 = DRAIN	1 = CATHODE	1 = CATHODE
2 = GATE	2 = COMMON ANODE	2 = ANODE 1
3 = SOURCE	3 = COMMON ANODE	3 = ANODE 2

Case style SMD-0.5 (Lead Formed)



NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. DIMENSION INCLUDES METALLIZATION FLASH.
5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

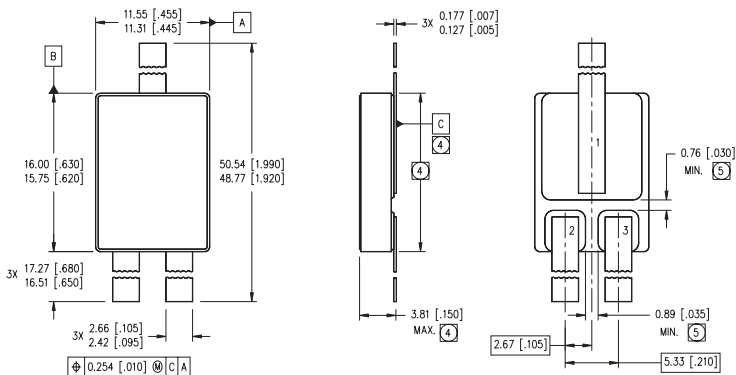
PAD ASSIGNMENTS

MOSFET
1 = DRAIN
2 = GATE
3 = SOURCE

SCHOTTKY SINGLE DIE
1 = CATHODE
2 = COMMON ANODE
3 = COMMON ANODE

SCHOTTKY DUAL DIE
1 = CATHODE
2 = ANODE 1
3 = ANODE 2

Case style SMD-1



NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. DATUM PLANE C & MAX. HEIGHT DIMENSION ARE MEASURED WITHIN THIS AREA.
5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

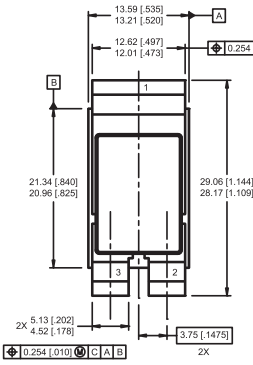
LEAD ASSIGNMENTS

MOSFET
1 = DRAIN
2 = GATE
3 = SOURCE

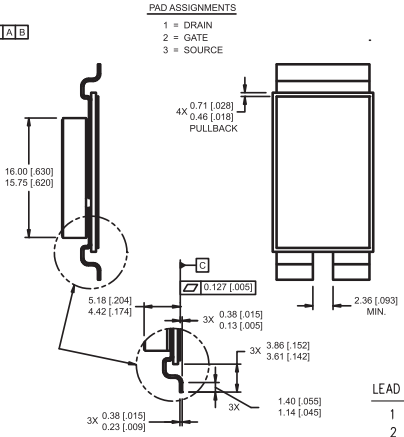
SCHOTTKY SINGLE DIE
1 = CATHODE
2 = COMMON ANODE
3 = COMMON ANODE

SCHOTTKY DUAL DIE
1 = CATHODE
2 = ANODE 1
3 = ANODE 2

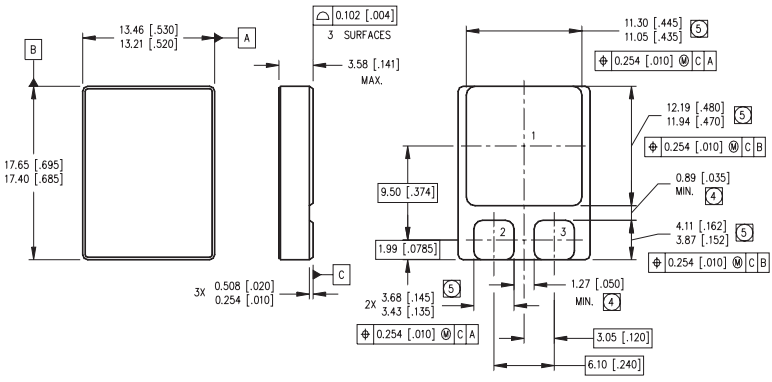
Case style SMD-1 (With Leads)



NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].



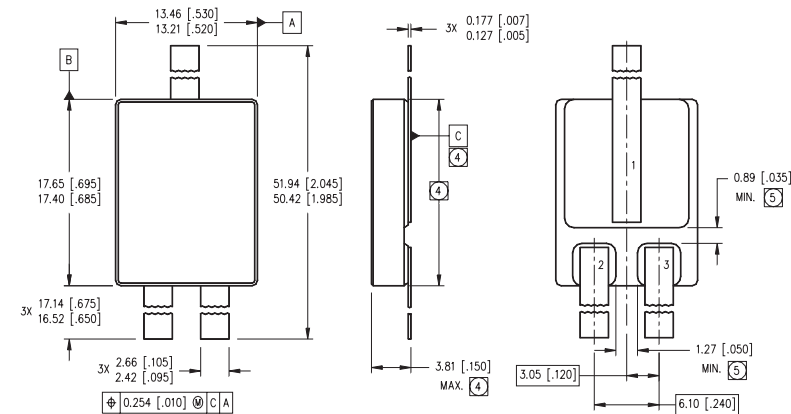
Case style SMD-1 (Carrier)



NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. DIMENSION INCLUDES METALLIZATION FLASH.
5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

PAD ASSIGNMENTS
1 = DRAIN
2 = GATE
3 = SOURCE

Case style SMD-2



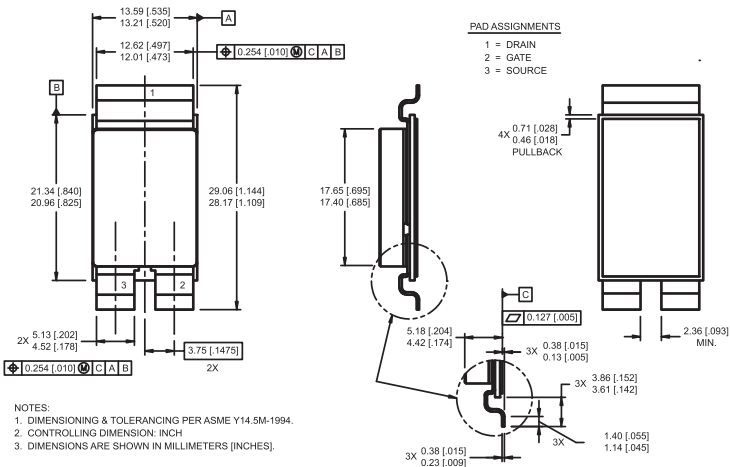
NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
4. DATUM PLANE C & MAX. HEIGHT DIMENSION ARE MEASURED WITHIN THIS AREA.
5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

LEAD ASSIGNMENTS

- 1 = DRAIN
- 2 = GATE
- 3 = SOURCE

Case style SMD-2 (With Leads)



NOTES:

1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].

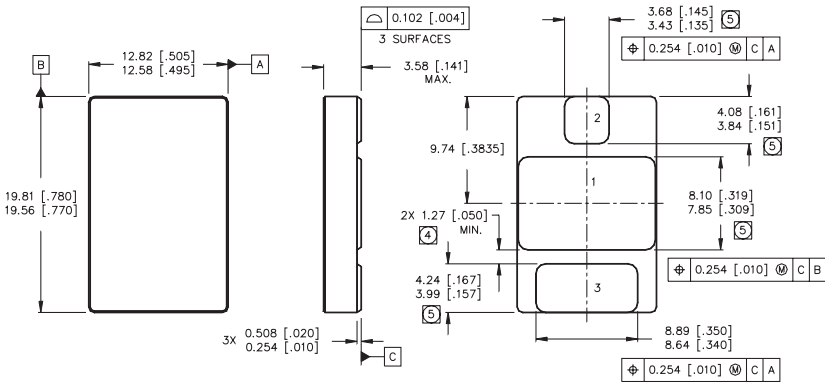
PAD ASSIGNMENTS

- 1 = DRAIN
- 2 = GATE
- 3 = SOURCE

LEAD ASSIGNMENTS

- 1 = DRAIN
- 2 = GATE
- 3 = SOURCE

Case style SMD-2 (Carrier)



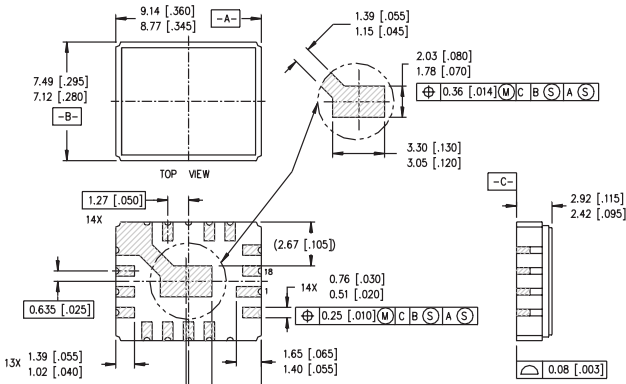
NOTES:

- 1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
- 2. CONTROLLING DIMENSION: INCH.
- 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
- 4. DIMENSION INCLUDES METALLIZATION FLASH.
- 5. DIMENSION DOES NOT INCLUDE METALLIZATION FLASH.

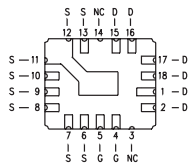
PAD ASSIGNMENTS

- 1 = DRAIN
- 2 = GATE
- 3 = SOURCE

Case style SMD-3



PAD ASSIGNMENTS



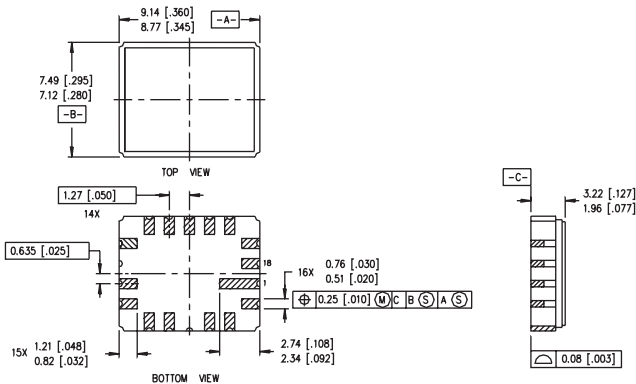
LEGEND

- G = GATE
- D = DRAIN
- S = SOURCE
- NC = NO CONNECTION

NOTES:

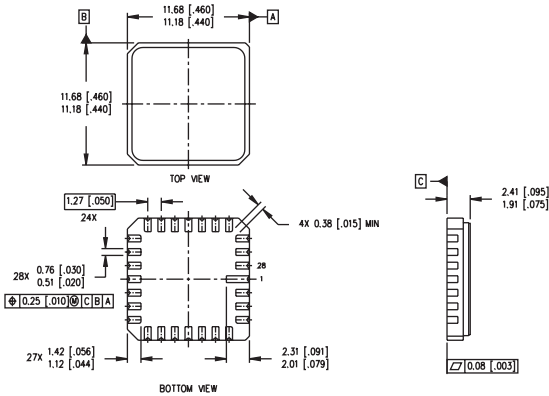
- 1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
- 2. CONTROLLING DIMENSION: INCH.
- 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].

Case style LCC-18 (MOSFET)



- NOTES:
1. DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982.
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].

Case style LCC-18 (CIC)

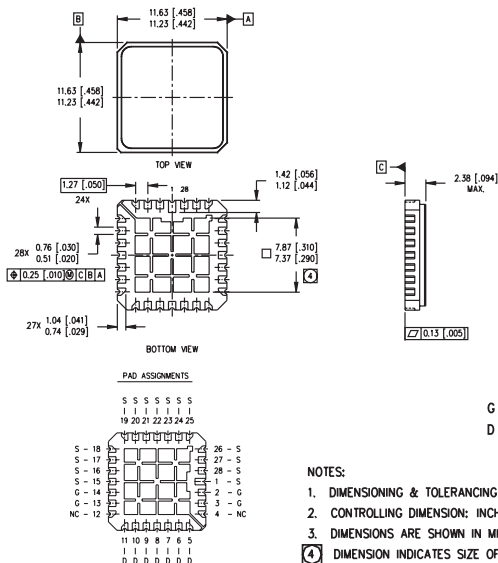


LEGEND

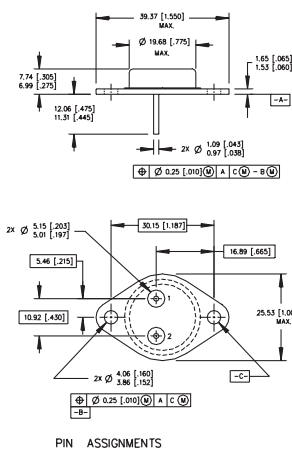
- G = GATE S = SOURCE
D = DRAIN NC = NO CONNECTION

- NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
 2. CONTROLLING DIMENSION: INCH
 3. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].

Case style LCC-28 (Quad Fet)



Case style LCC-28 (Single Fet)



HEXFET

1 - SOURCE
2 - GATE
3 - DRAIN (CASE)

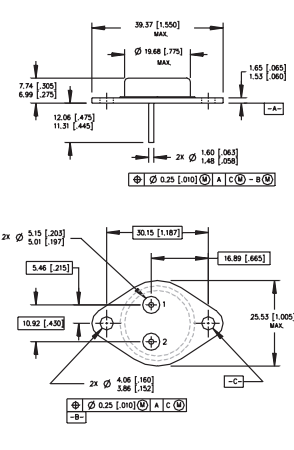
SCHOTTKY

1 - ANODE 1
2 - ANODE 2
3 - COMMON CATHODE (CASE)

IGBT

1 - GATE
2 - EMITTER
3 - COLLECTOR (CASE)

NOTES:



PIN ASSIGNMENTS

1 - SOURCE
2 - GATE
3 - DRAIN (CASE)

NOTES:

Case style TO-204AA

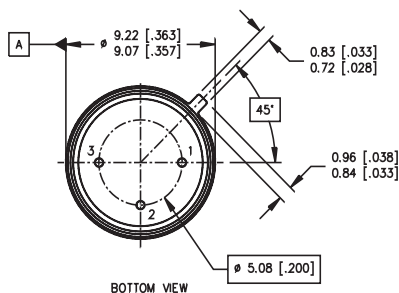
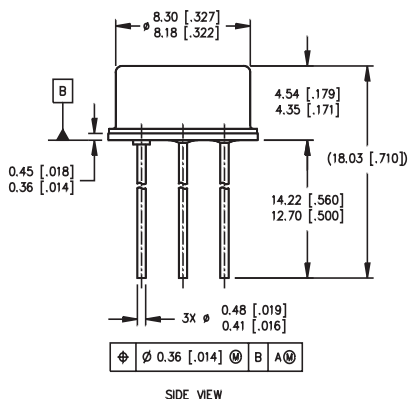
For data sheets visit our Web site at
www.irf.com

K-20

Case style TO-204AE

Technical Assistance U.S.: +1 310 252 7105
Europe: +44 2086458015
Asia: +65 6838 4632

PACKAGES



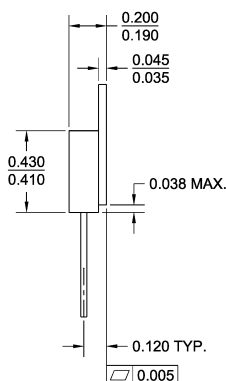
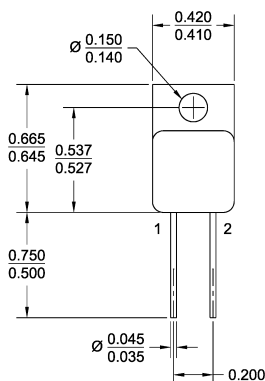
NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME 14.5M-1994.
2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. CONFORMS TO JEDEC OUTLINE TO-205AF (TO-39).

PIN ASSIGNMENTS

- 1=SOURCE
2=GATE
3=DRAIN

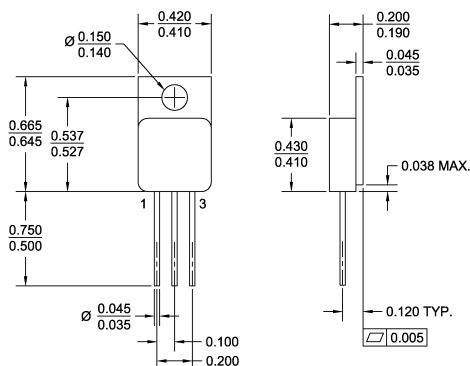
Case style TO-205AF (TO-39)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
2.- CONTROLLING DIMENSION: INCH.
3.- DIMENSIONS ARE SHOWN IN INCHES.
4.- TOLERANCES ARE ± 0.010 U.O.S.
5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

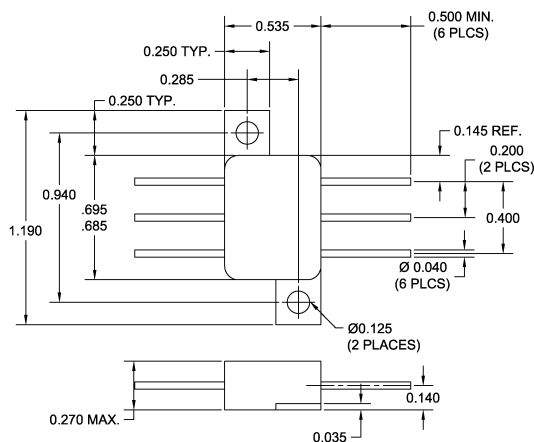
Case style TO-257 2-Pin (T-2)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.
- 6.- OUTLINE USED WITH OM PART NUMBERS ONLY.

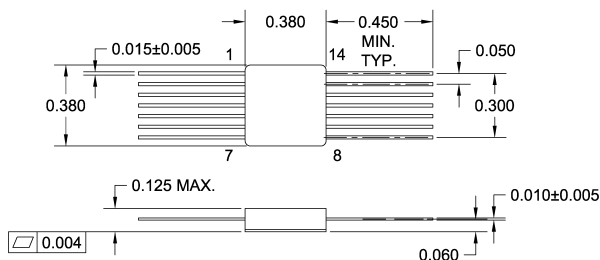
Case style Metal TO- 257AA 3-Pin (T-3)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

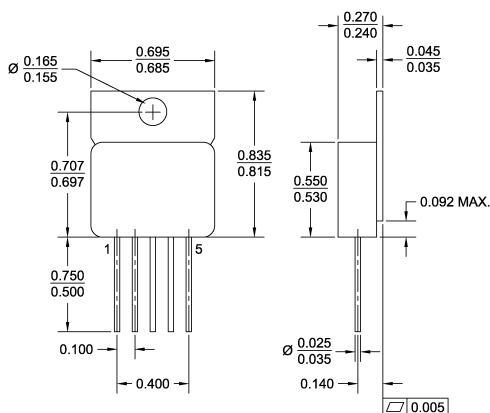
Case style Metal 6-Pin (C-6)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ±0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

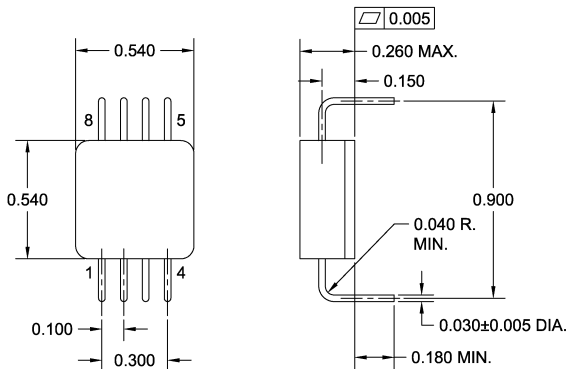
Case style Metal 14-Pin (F-14L)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ±0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

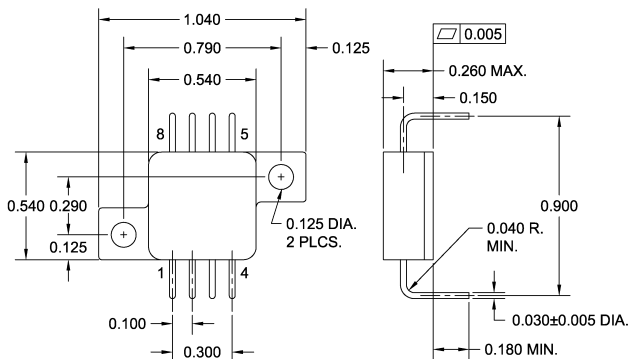
Case style Metal MO-078AA 5-Pin (C-5)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

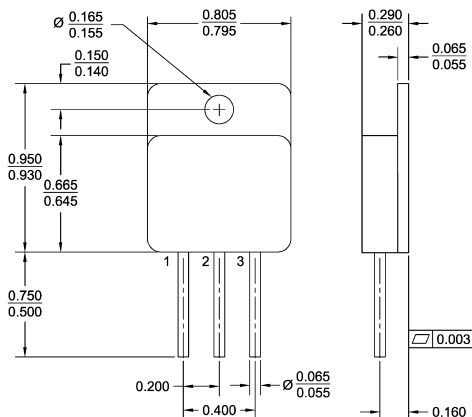
Case style Metal 8-Pin Powerpac (D-8)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

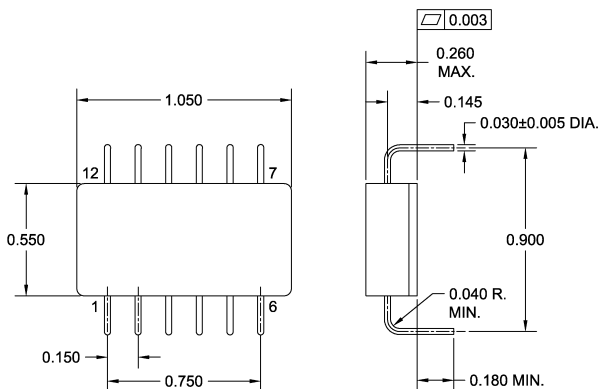
Case style Metal 8-Pin (D-8Z)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

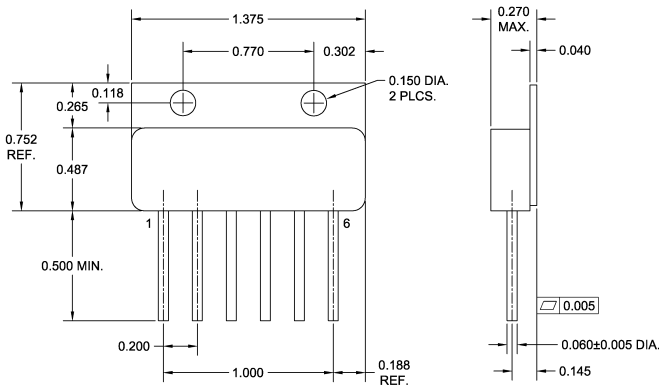
Case style Metal TO-267AA 3-Pin (C-3J)



NOTES:

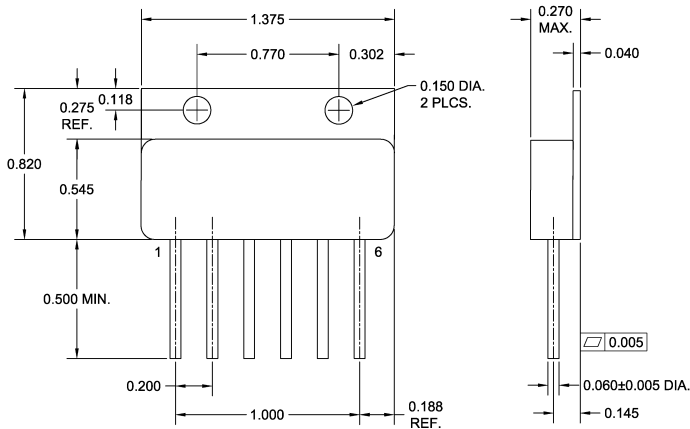
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style Metal 12-Pin (D-12)



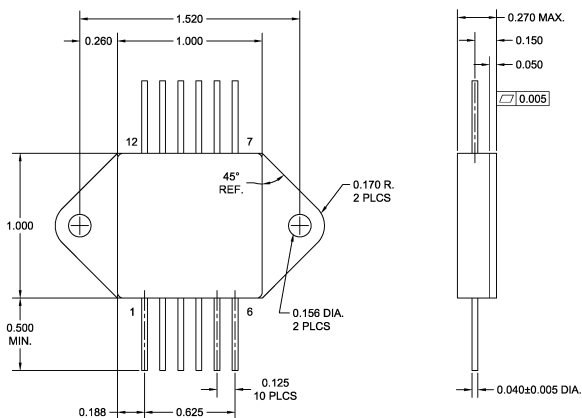
- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style Metal 6-Pin SIP (S-6)

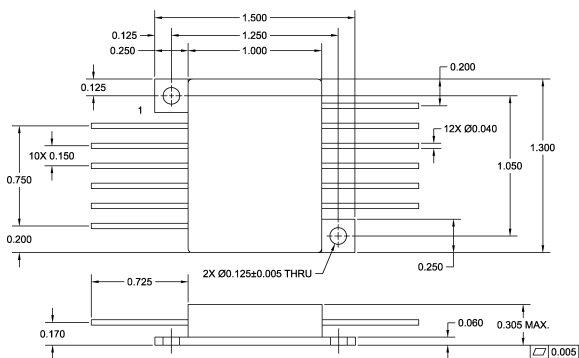


- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

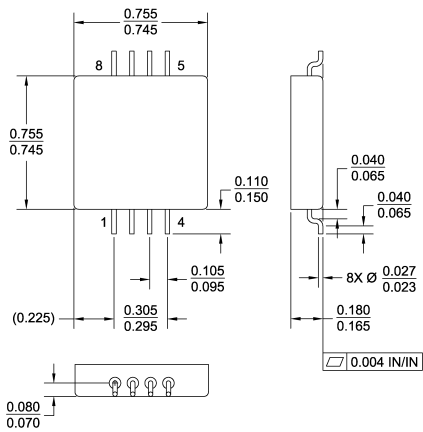
Case style Metal 6-Pin SIP (S-6D)



Case style Metal 12-Pin (M-12)

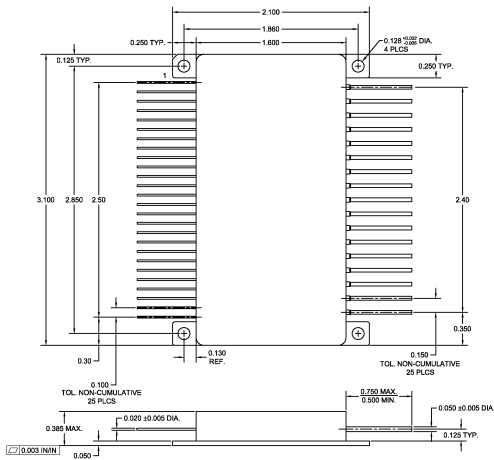


Case style Metal 12-Pin (F-12A)



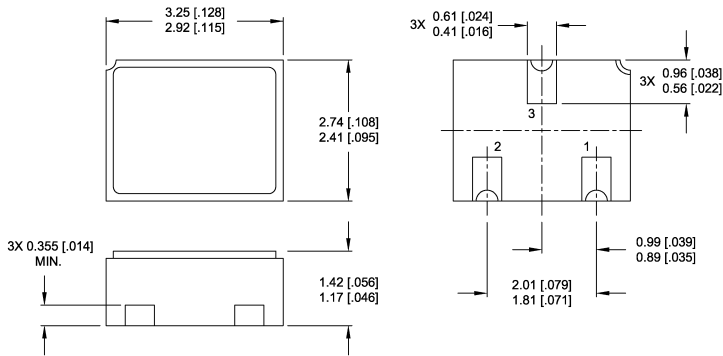
- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style 8-Lead Flat Pack



- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style Metal 43-Pin (F-43)



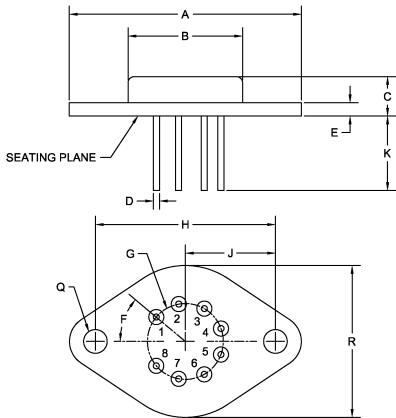
NOTES:

1. OUTLINE CONFORMS TO MIL-PRF-19500/255L
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.

PAD ASSIGNMENTS

- 1 = GATE
- 2 = SOURCE
- 3 = DRAIN

Case style UB

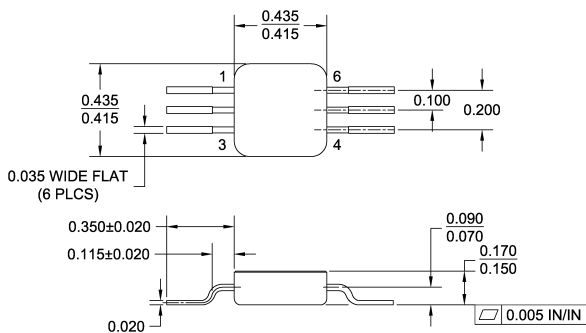


SYMBOL	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	1.510	1.550	38.35	39.37
B	0.745	0.770	18.92	19.56
C	0.260	0.300	6.60	7.62
D	0.038	0.042	0.97	1.07
E	0.080	0.105	2.03	2.67
F	40° BASIC		40° BASIC	
G	0.500 BASIC		12.7 BASIC	
H	1.186 BASIC		30.12 BASIC	
J	0.593 BASIC		15.06 BASIC	
K	0.400	0.500	10.16	12.70
Q	0.151	0.161	3.84	4.09
R	0.980	1.020	24.89	25.91

NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ±0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

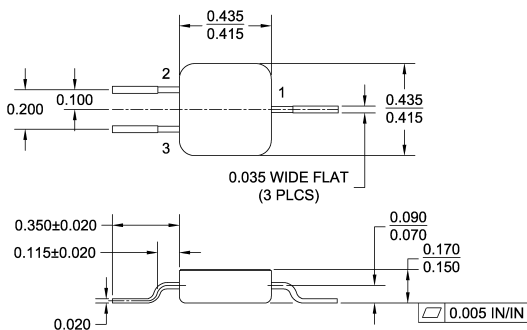
Case style Metal 8-Pin (TO-3-8)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ±0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

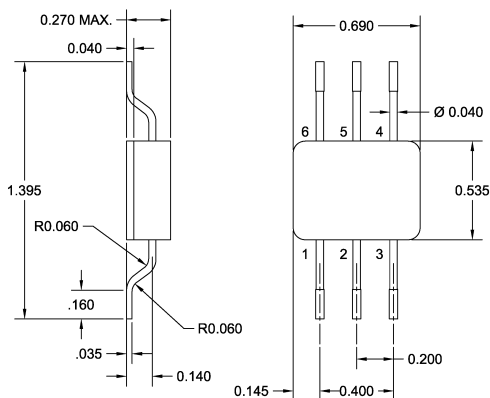
Case style 6-Pin Surface Mount (SMD-6)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ±0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

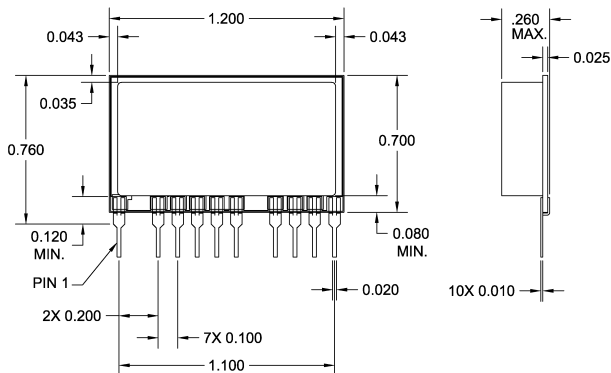
Case style 3-Pin Surface Mount (SMD-3)



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 2.- CONTROLLING DIMENSION: INCH.
- 3.- DIMENSIONS ARE SHOWN IN INCHES.
- 4.- TOLERANCES ARE ± 0.010 U.O.S.
- 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

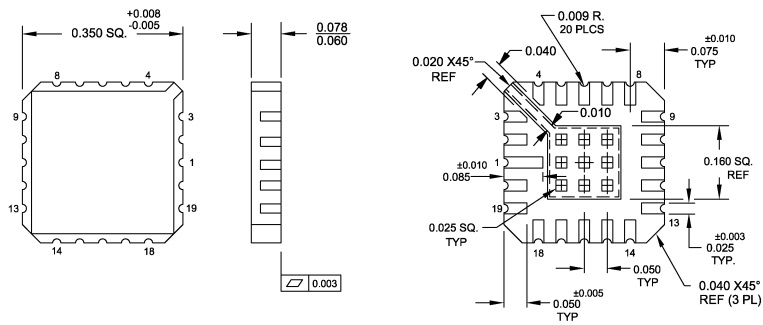
Case style SMD-6C



NOTES:

- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
2.- CONTROLLING DIMENSION: INCH.
3.- DIMENSIONS ARE SHOWN IN INCHES.
4.- TOLERANCES ARE ± 0.010 U.O.S.
5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

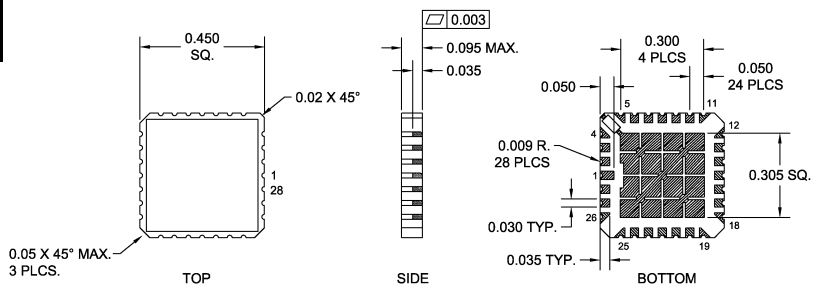
Case style Industrial Plastic 10-Pin (SP-10A)



- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

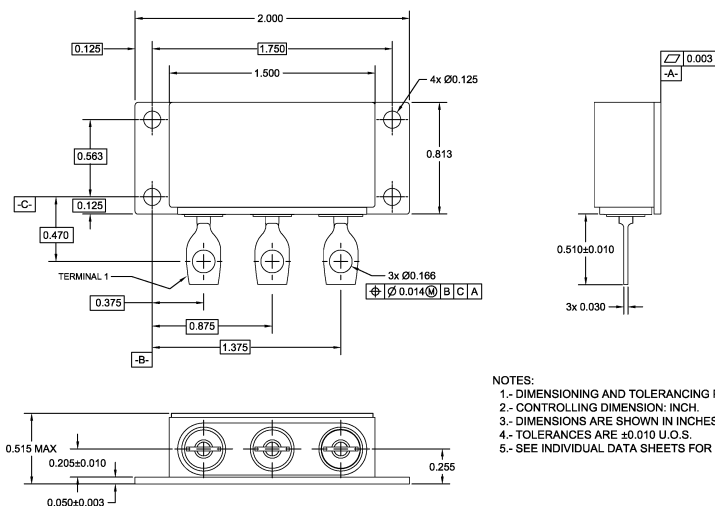
Case style Surface Mount 20-Pin (Omni-rel LCC-20)

PACKAGES



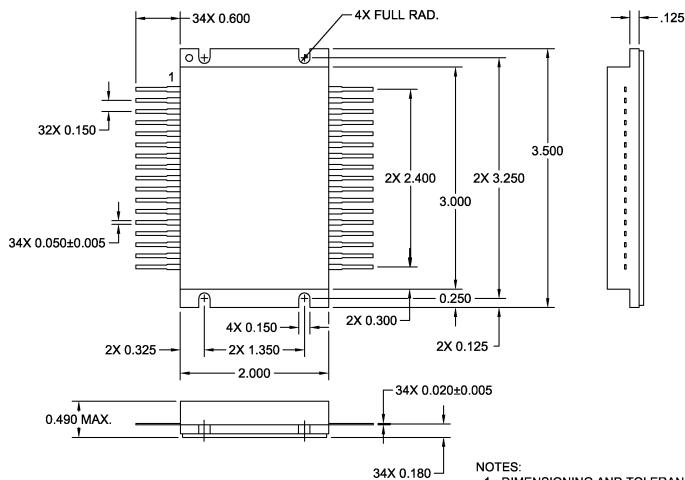
- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style Surface Mount 28-Pin (Omni-rel LCC-28)



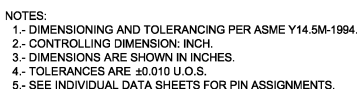
- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

Case style Metal 3-Pin Power Block (PB-3A)

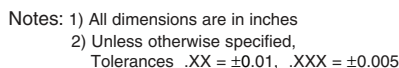


- NOTES:
- 1.- DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
 - 2.- CONTROLLING DIMENSION: INCH.
 - 3.- DIMENSIONS ARE SHOWN IN INCHES.
 - 4.- TOLERANCES ARE ± 0.010 U.O.S.
 - 5.- SEE INDIVIDUAL DATA SHEETS FOR PIN ASSIGNMENTS.

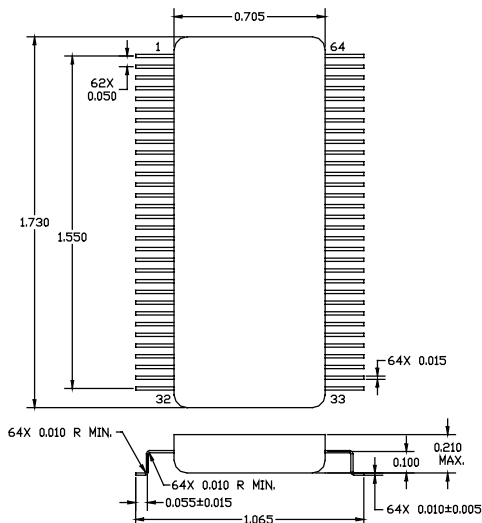
Case style Plastic 34-Pin (MP-3T)



PACKAGES



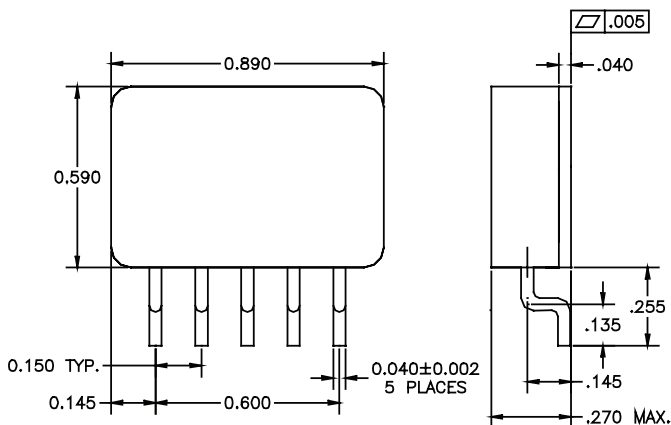
Asia: +65 6838 4632



Notes

1. Dimensioning and Tolerancing per ASME Y14.5SM-1994
2. Controlling Dimension: Inch
3. Dimensions are shown in inches
4. Tolerances are +/- 0.005 UOS

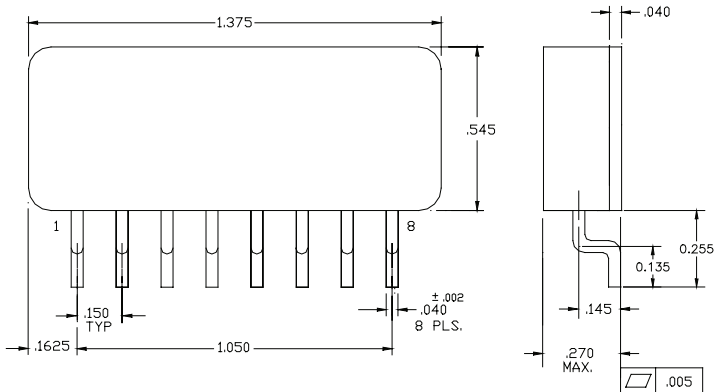
Case style 64 Pin Flatpack



Notes

1. Dimensioning and Tolerancing per ASME Y14.5SM-1994
2. Controlling Dimension: Inch
3. Dimensions are shown in inches
4. Tolerances are +/- 0.005 UOS

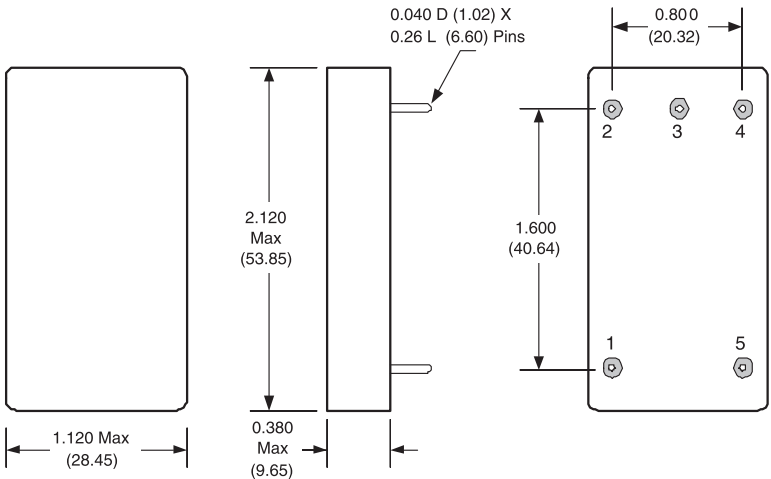
Case style 5 Pin SMT



Notes

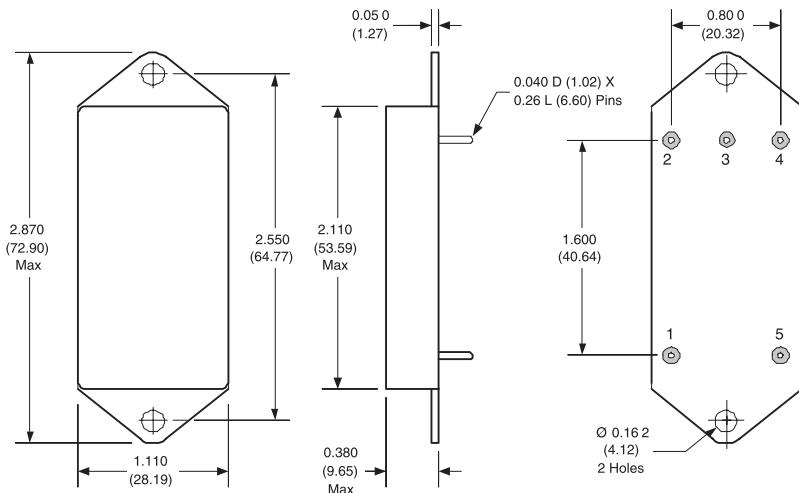
1. Dimensioning and Tolerancing per ASME Y14.5SM-1994
2. Controlling Dimension: Inch
3. Dimensions are shown in inches
4. Tolerances are +/- 0.005 UOS

Case style 8 Pin SMT

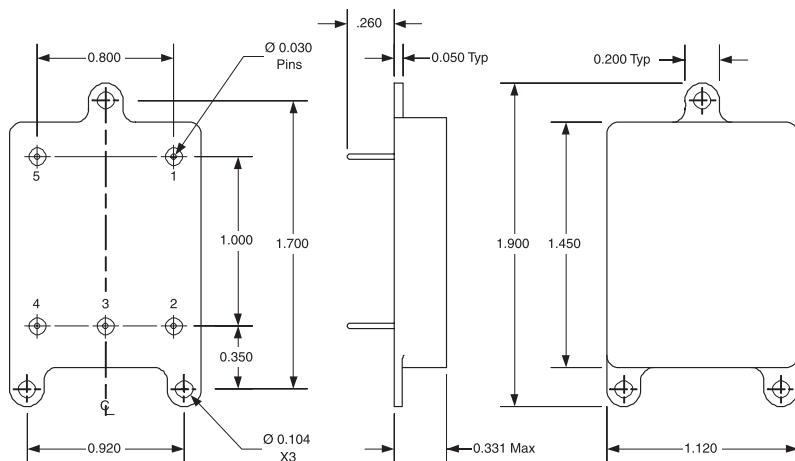


Unless otherwise specified
dimensional tolerance is XXX ± 0.005

Case style AFC-AFM-AFV (unflanged)



Case style AFC-AFM-AFV (flanged)



Case style AMH

International
IOR Rectifier



$\varnothing 0.125$
 3 Places

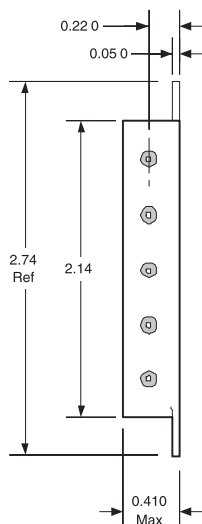
R 0.15 Typ

0.040 D x 0.26 L Pins

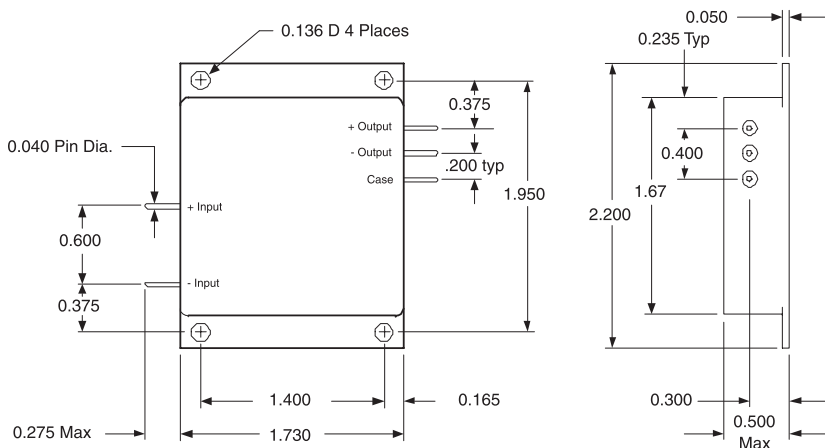
1, 2, 3, 4, 5, 6, 7, 8, 9, 10

1.230
 1.53

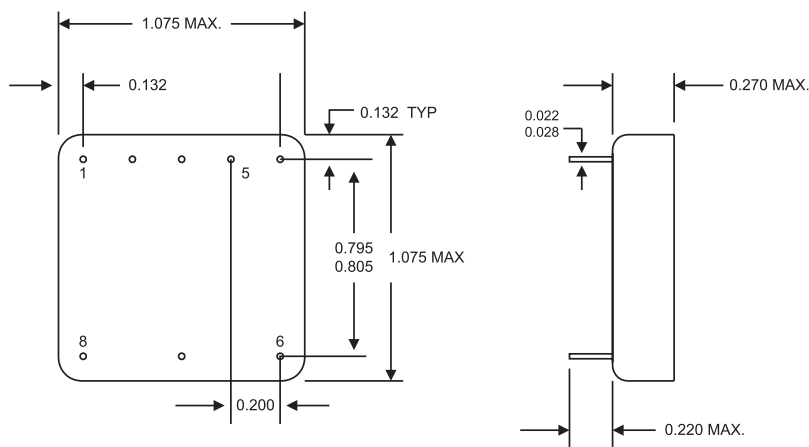
0.800
 0.400
 1.200
 1.600
 2.440
 0.420
 0.150 Typ



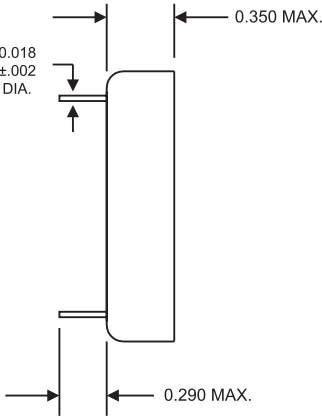
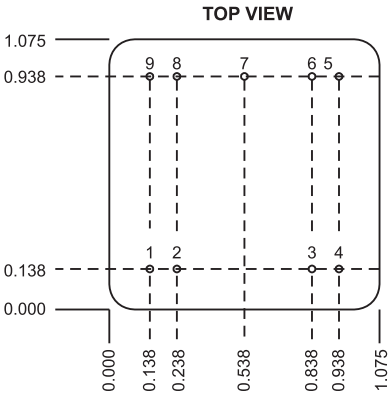
Case style AMR



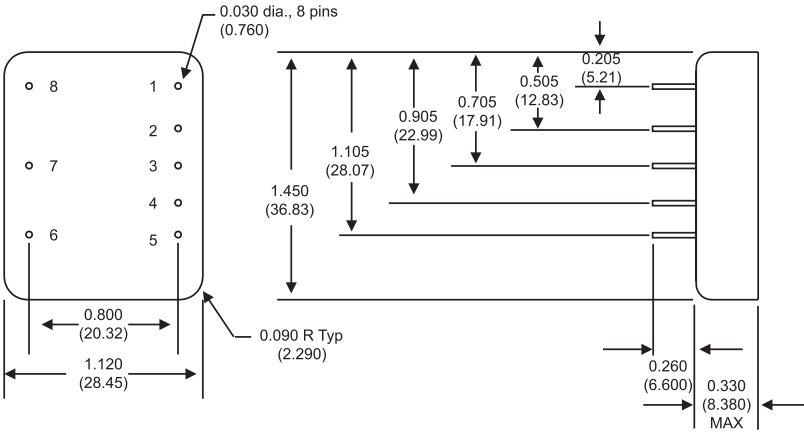
Case style ARF



Case style ASA

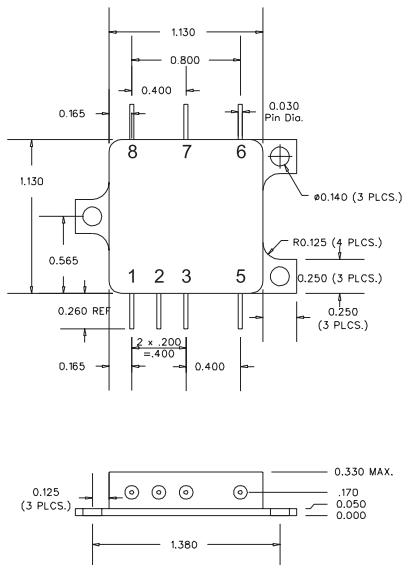


Case style ASF

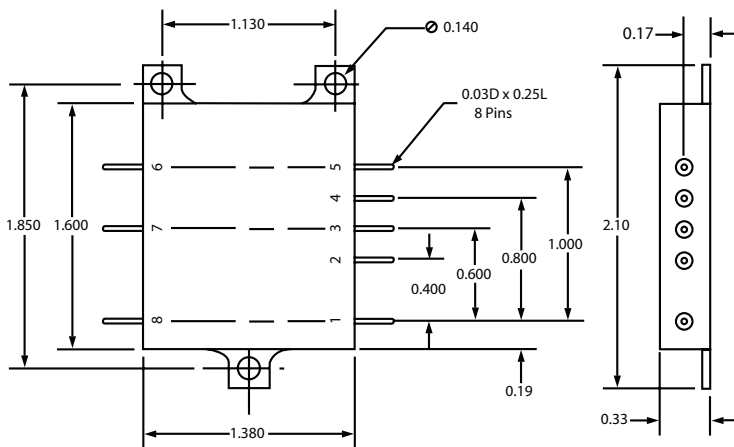


Case style AHF

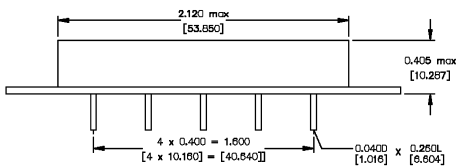
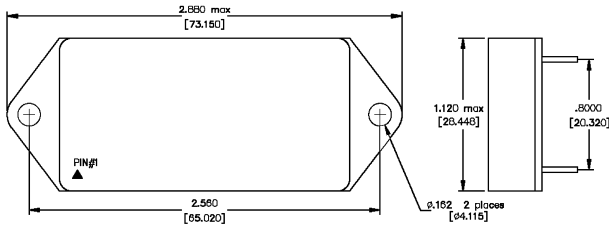
Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$



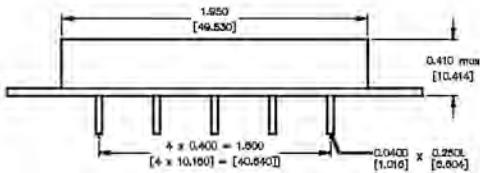
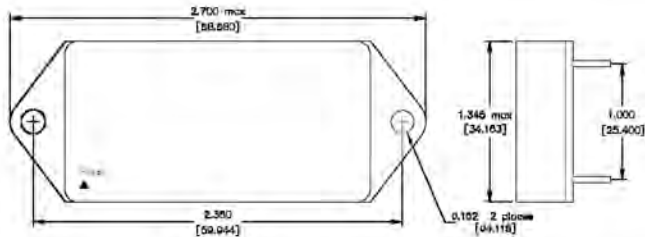
Case style AMA



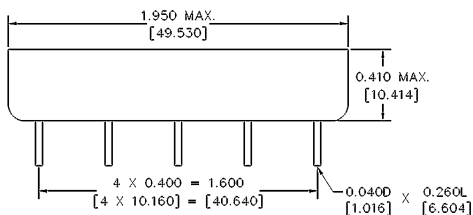
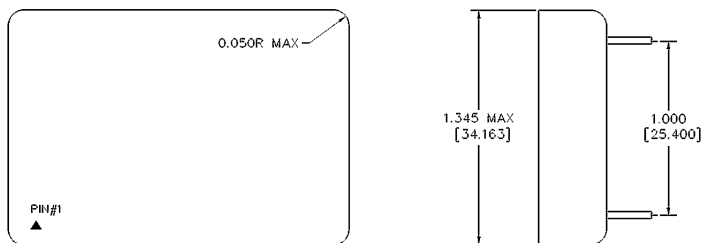
Case style AMF



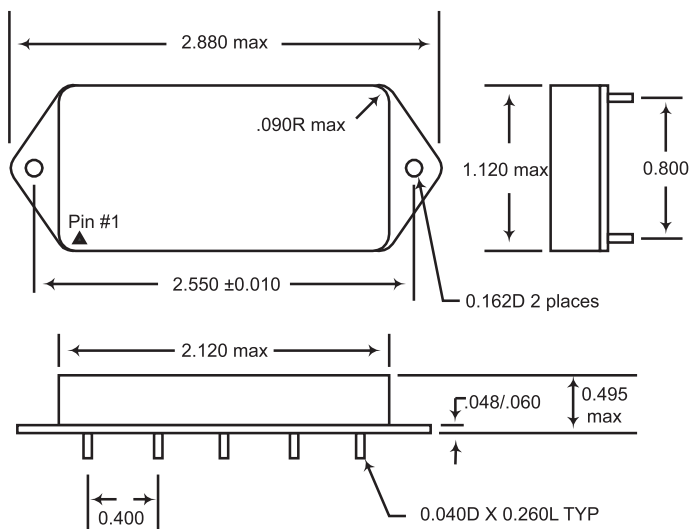
Case style ATR (flanged with single or dual output)



Case style ATR (flanged with triple output)



Case style ATR (unflanged)

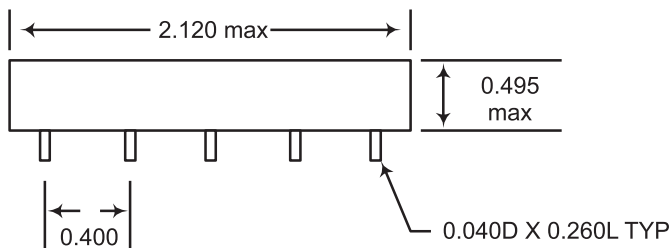
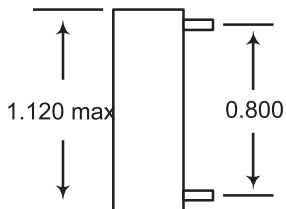


Case style AHE (flanged)

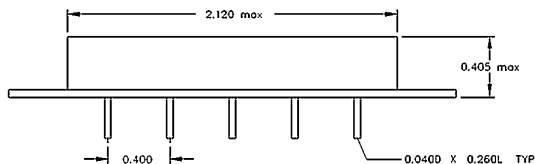
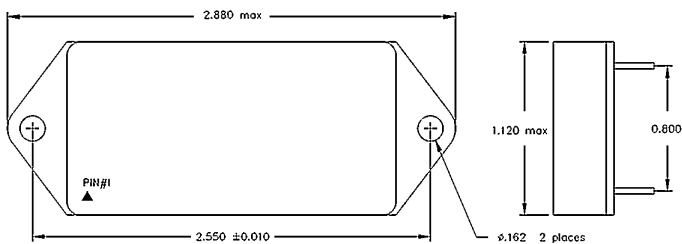
Package Outlines

Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$

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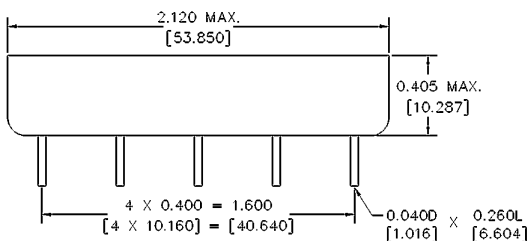
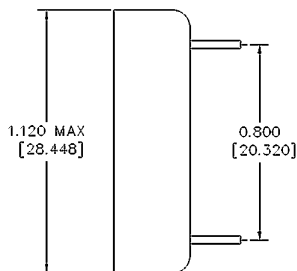
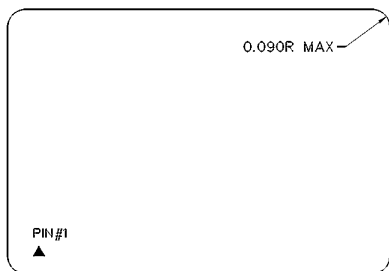


Case style AHE (unflanged)

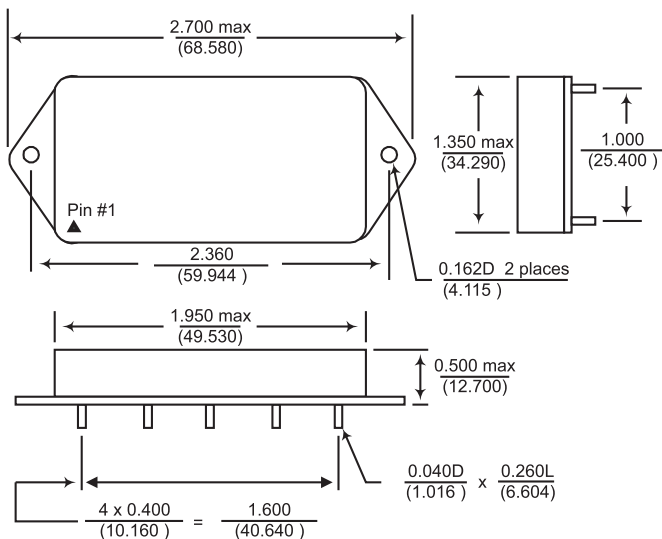


Case style AHV (flanged)

Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$



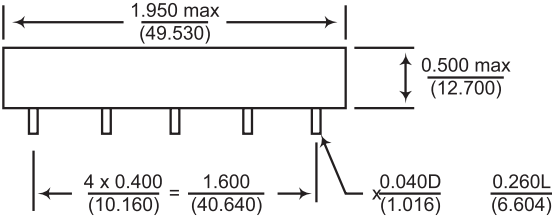
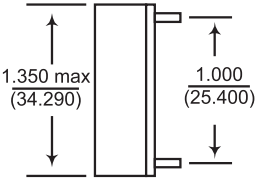
Case style AHV (unflanged)



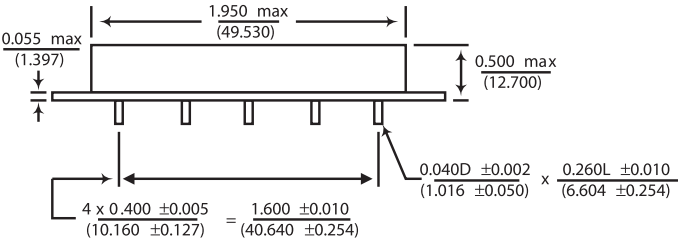
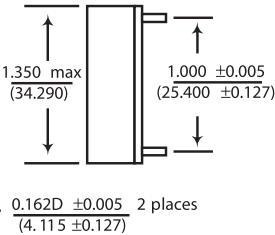
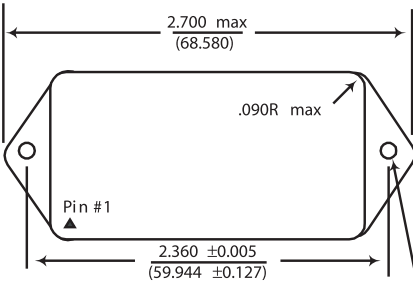
Case style ATO (flanged)

Package Outlines

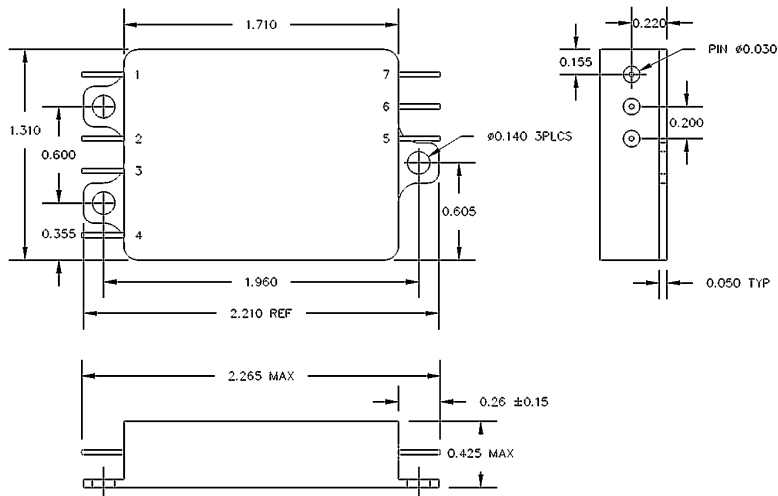
Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$



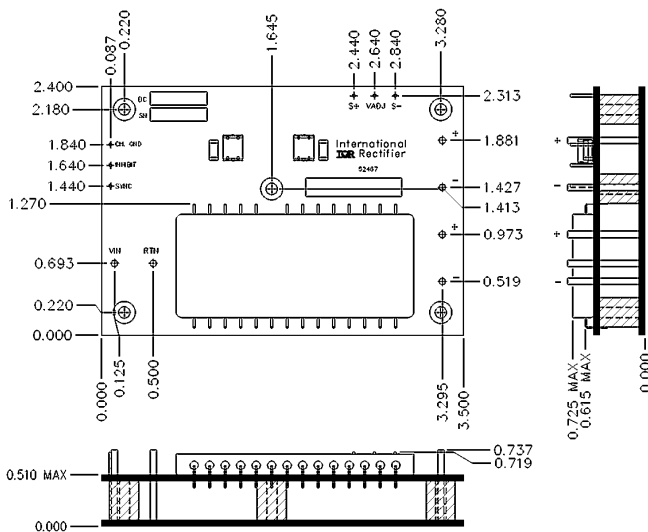
Case style ATO (unflanged)



Case style ATW



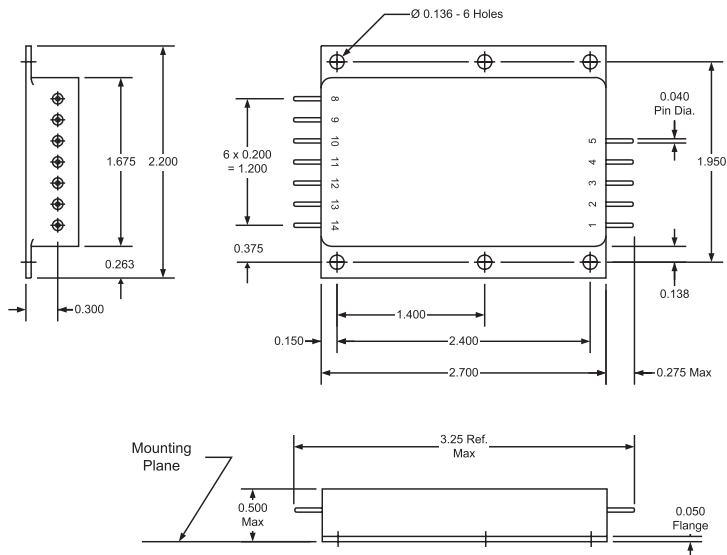
Case style S Series



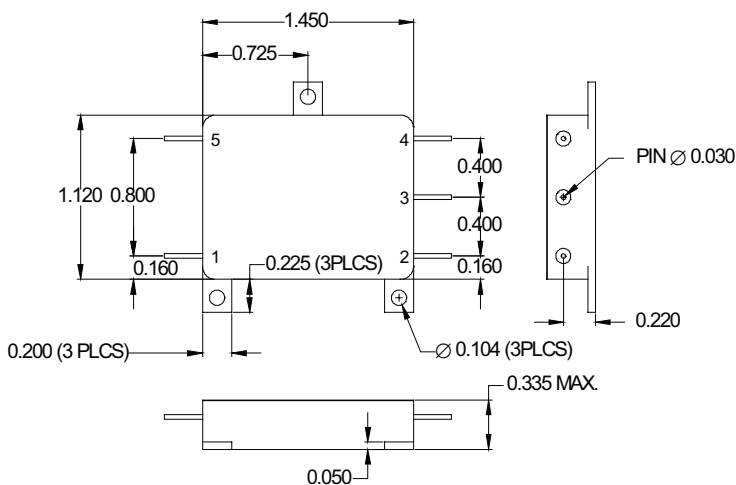
Case style Z Series

Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$

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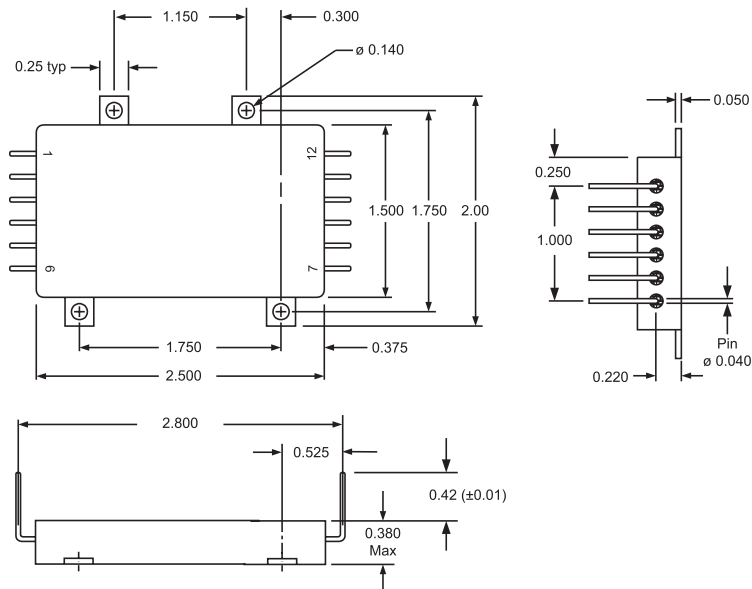


Case style ART-ARH-ARM

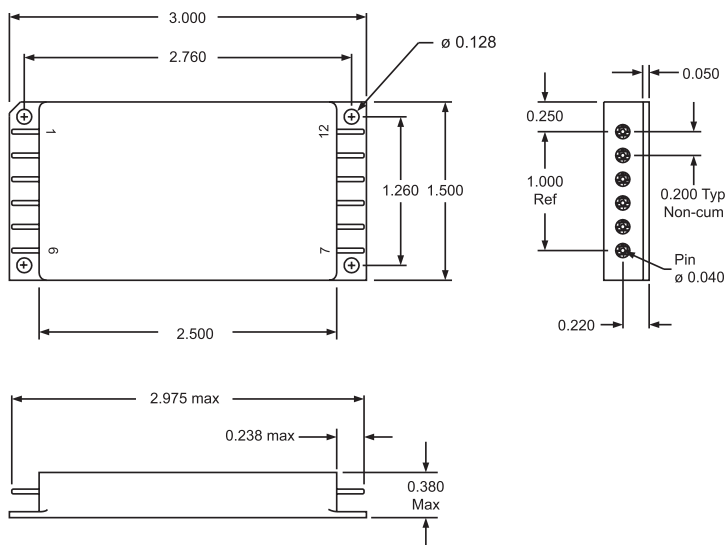


Case style AFH

Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$



Case style AFL-AME-AHP (Type W)

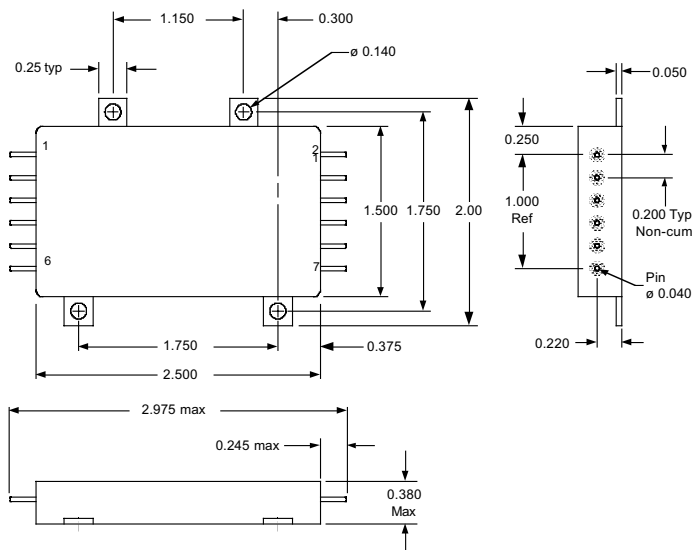


Case style AFL-AME-AHP (Type X)

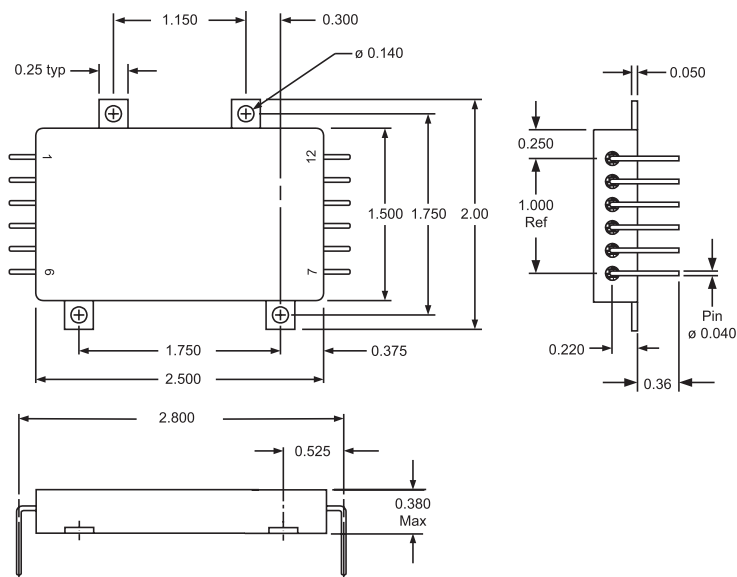
Package Outlines

Unless otherwise specified
dimensional tolerance is $XXX \pm 0.005$

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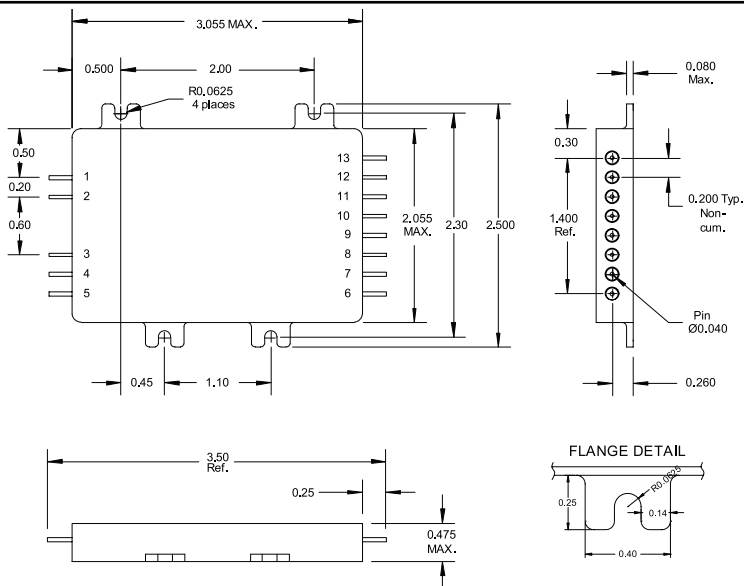


Case style AFL-AME-AHP (Type Y)



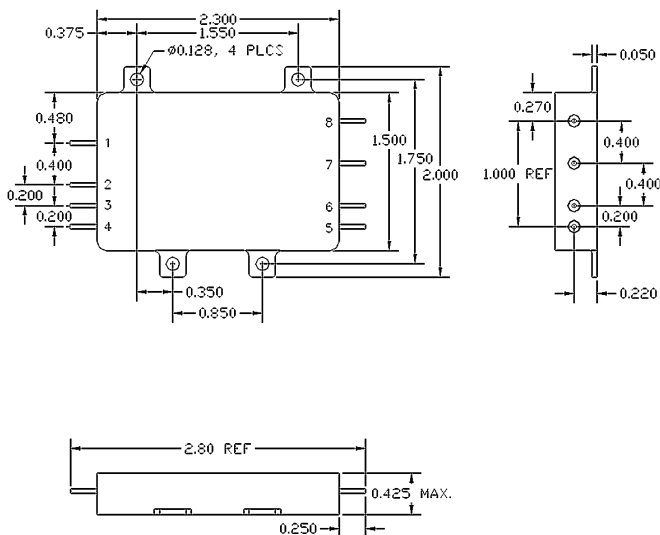
Case style AFL-AME-AHP (Type Z)

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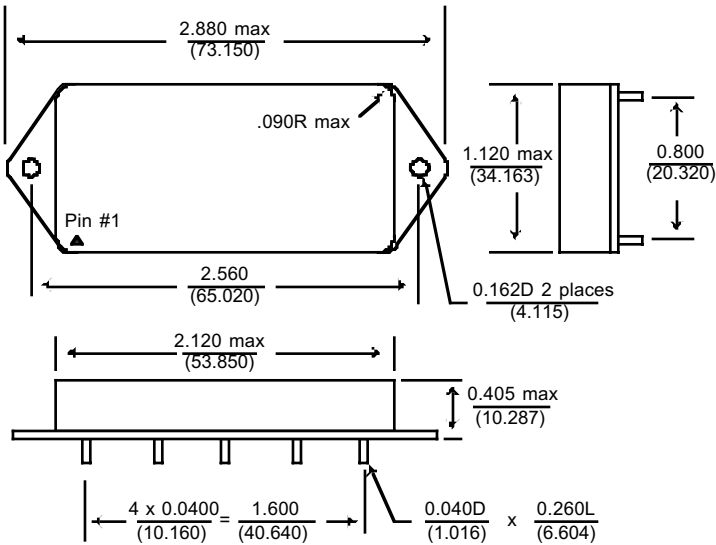


Tolerance : .XX ± 0.01
.XXX ± 0.005

Case style M3G-M3H



Case style ATS-M3L-LS



NOTES: Unless otherwise specified, dimensional tolerance is: $.XXX \pm 0.005$

Case style ATR (Single)

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