

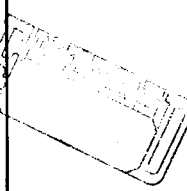


PRELIMINARY

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

15R6M&Z



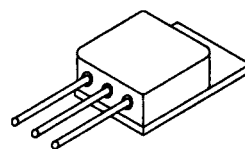
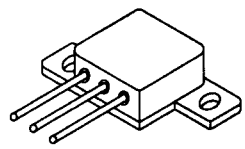
50 AMP
150 VOLTS
50nsec
EPID[®]
RECTIFIER

Designer's Data Sheet

FEATURES:

- **EPID[®]** High Voltage Schottky Process
- Minimal recovery time and leakage increase over temperature versus comparable rectifiers
- Lower capacitance than conventional Schottkys
- Hyper Fast Recovery: 50 nsec Maximum
- High Surge Rating
- Hermetically Sealed Power Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- Higher Voltage classes available
- TX, TXV and Space Level Screening Available

TO-254 TO-254Z

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage 15R6M&Z	VRRM VRWM VR	150	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	50	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	400	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.4	°C/W

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET#: RH0139 A

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15R6M&Z

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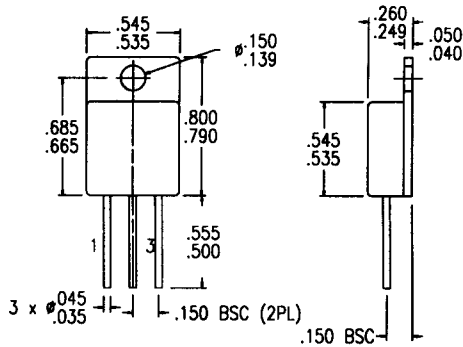
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300µs Pulse) note 1 (IF = 50 Adc, TA=25°C, 300µs Pulse) note 1	VF	0.97 1.14	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA= 100°C, 300µs Pulse) note 1 (IF = 25 Adc, TA= - 55°C, 300µs Pulse) note 1	VF	0.87 1.1	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	100	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	2	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	250	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	50	nsec

CASE OUTLINE: TO-254

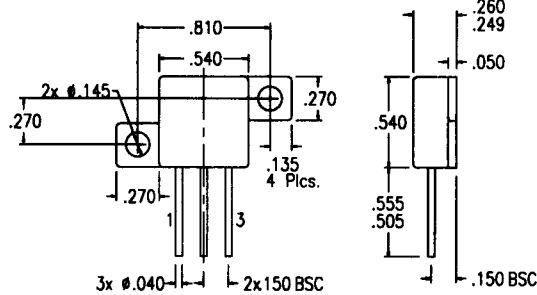
PIN 1: CATHODE
 PIN 2: ANODE
 PIN 3: ANODE

NOTE 1
 Connect pins
 2 & 3 together
 in application.



CASE OUTLINE: TO-254Z

PIN 1: CATHODE
 PIN 2: ANODE
 PIN 3: ANODE



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

