



PRELIMINARY

SOLID STATE DEVICES, INC

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

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

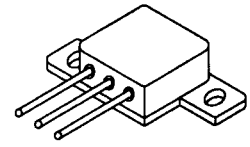
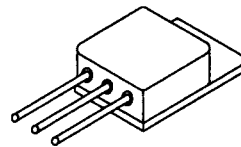
15R6M&Z



**50 AMP
150 VOLTS
50nsec
EPID®
RECTIFIER**

TO-254

TO-254Z



MAXIMUM RATINGS

| RATING | SYMBOL | VALUE | UNIT |
|---|--------------------|-------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage | 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

MED

15R6M&Z

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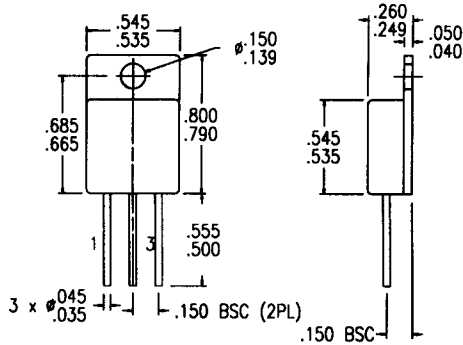
ELECTRICAL CHARACTERISTICS

| 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

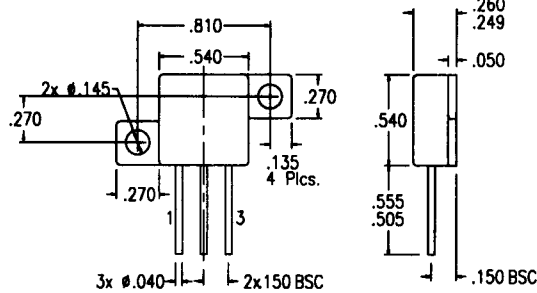
PIN 1: CATHODE
 PIN 2: ANODE
 PIN 3: ANODE

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

