

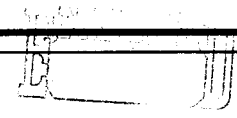


**SOLID STATE DEVICES, INC**

PRELIMINARY

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

**SSR1045M  
SSR1045Z**



**10 AMP  
45 VOLTS  
SCHOTTKY  
RECTIFIER**

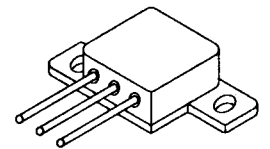
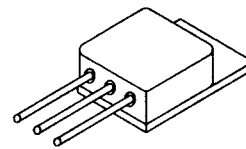
**Designer's Data Sheet**

**FEATURES:**

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Isolated Hermetically Sealed Power Package
- Ceramic Seals for Improved Hermeticity
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
  
- TX, TXV and Space Level Screening Available

TO-254

TO-254Z



**MAXIMUM RATINGS**

| RATING   | SYMBOL     | VALUE       | UNIT  |
|--|------------|-------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage  | VRRM       | 45          | Volts |
|  | VRWM       |             |       |
|  | VR         |             |       |
| Average Rectified Forward Current<br>(Resistive Load, 60Hz, Sine Wave, TA=25°C)  | IO         | 10          | Amps  |
| Peak Surge Current<br>(8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C) | IFSM       | 150         | Amps  |
| Operating and storage temperature  | Top & Tstg | -65 to +175 | °C    |
| Maximum Thermal Resistance<br>Junction to Case   | RθJC       | 1.5         | °C/W  |

Available with Glass or Ceramic Seals. Contact Factory for Details.

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

**DATA SHEET#: RS0135 B**

**MED**

**SSR1045M**  
**SSR1045Z**

PRELIMINARY

**SSDI**

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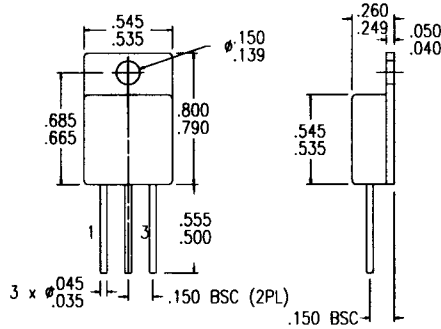
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**ELECTRICAL CHARACTERISTICS**

| CHARACTERISTICS  | SYMBOL     | MAXIMUM      | UNIT |
|--|------------|--------------|------|
| <b>Instantaneous Forward Voltage Drop</b><br>(IF = 5 Adc, TA=25°C, 300µs Pulse)<br>(IF = 10 Adc, TA=25°C, 300µs Pulse) | <b>VF1</b> | 0.53<br>0.64 | Vdc  |
| <b>Instantaneous Forward Voltage Drop</b><br>(IF = 5 Adc, TA= - 55°C, 300µs Pulse)                                     | <b>VF2</b> | 0.59         | Vdc  |
| <b>Reverse Leakage Current</b><br>(Rated VR, TA=25°C, 300µs pulse minimum)   | <b>IR1</b> | 100          | µA   |
| <b>Reverse Leakage Current</b><br>(Rated VR, TA=100°C, 300µs pulse minimum)  | <b>IR2</b> | 10           | mA   |
| <b>Junction Capacitance</b><br>(VR = 10 Vdc, TA=25°C, f= 1 MHz )   | <b>CJ</b>  | 400          | pf   |

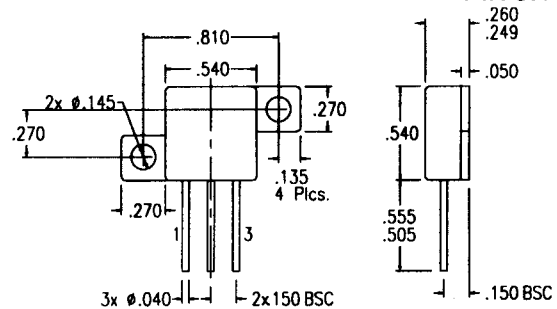
**CASE OUTLINE: TO-254**

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



**CASE OUTLINE: TO-254Z**

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



**TYPICAL OPERATING CURVES**

(TA=25°C Unless otherwise specified)

