

**TECHNICAL DATA**  
**DATA SHEET 1069, REV. PRELIMINARY****HERMETIC POWER SCHOTTKY RECTIFIER**  
**200°C Maximum Operation Temperature**  
Add Suffix "S" to Part Number for S-100 Screening.

**DESCRIPTION:** A 100 VOLT, 3 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-4 / SHD-4A / SHD-4B PACKAGE.

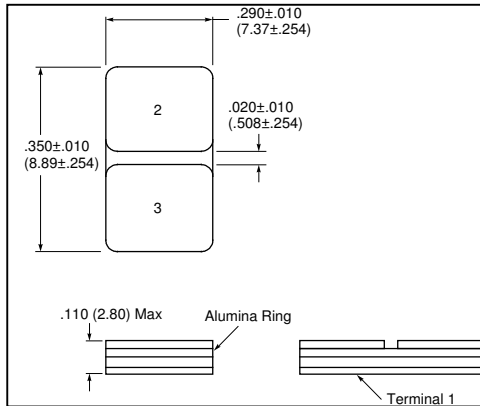
**MAXIMUM RATINGS**ALL RATINGS ARE @  $T_C = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

| RATING                                                                              | SYMBOL          | MAX.        | UNITS              |
|-------------------------------------------------------------------------------------|-----------------|-------------|--------------------|
| PEAK INVERSE VOLTAGE                                                                | PIV             | 100         | Volts              |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )      | $I_O$           | 6.0         | Amps               |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT<br>( $t=8.3\text{ms}$ , Sine) (PER LEG) | $I_{FSM}$       | 55          | Amps               |
| MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ ) (PER LEG)                          | $C_T$           | 100         | pF                 |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)                  | $R_{\theta JC}$ | 1.8         | $^\circ\text{C/W}$ |
| MAXIMUM OPERATING TEMPERATURE RANGE                                                 | $T_{op}$        | -65 to +200 | $^\circ\text{C}$   |
| MAXIMUM STORAGE TEMPERATURE RANGE                                                   | $T_{stg}$       | -65 to +175 | $^\circ\text{C}$   |

**ELECTRICAL CHARACTERISTICS**

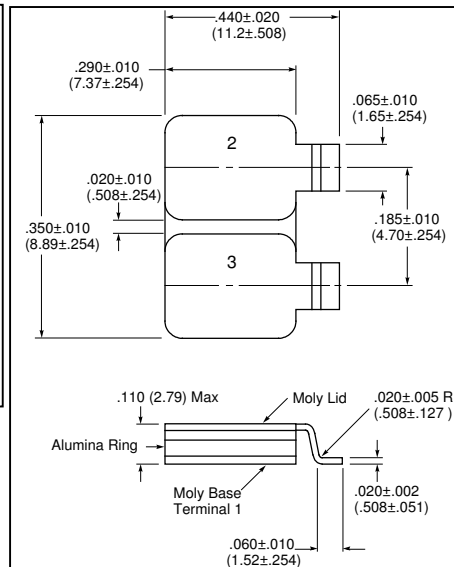
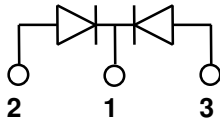
| CHARACTERISTIC                                                                                                                      | SYMBOL | MAX.         | UNITS |
|-------------------------------------------------------------------------------------------------------------------------------------|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 3.0\text{ Amps}$ ) (PER LEG)<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ | $V_f$  | 0.84<br>0.68 | Volts |
| MAXIMUM REVERSE CURRENT ( $I_r$ @ 100V PIV) (PER LEG)<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$                      | $I_r$  | 0.07<br>1.6  | mA    |

**MECHANICAL DIMENSIONS: in inches / mm**

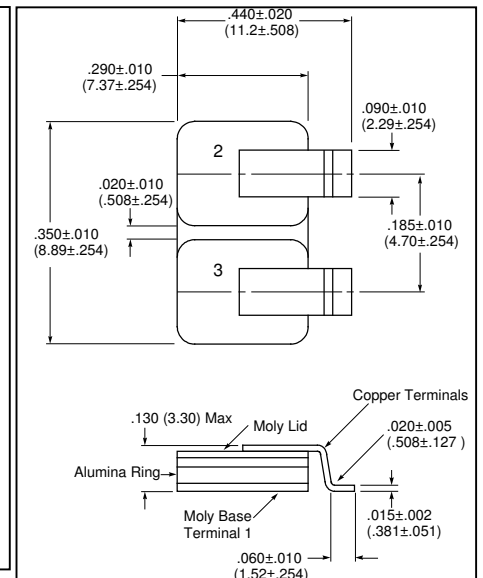


**SHD-4**

**COMMON CATHODE**

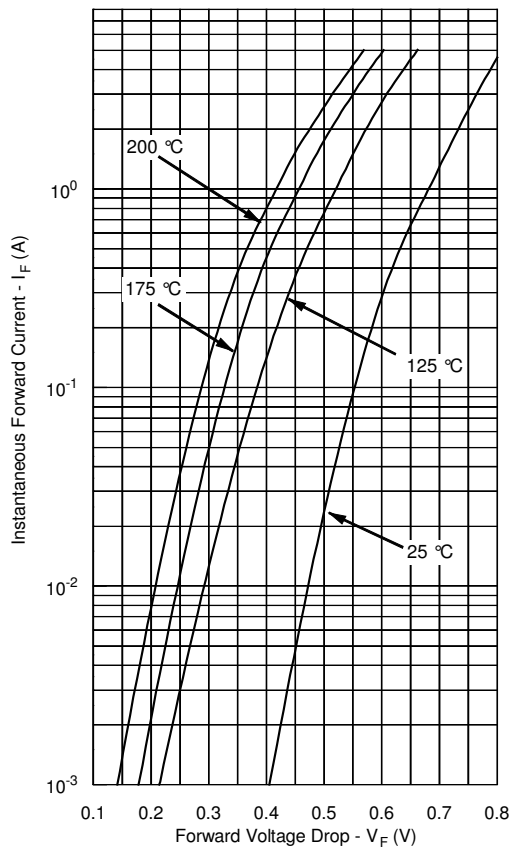


**SHD-4A**

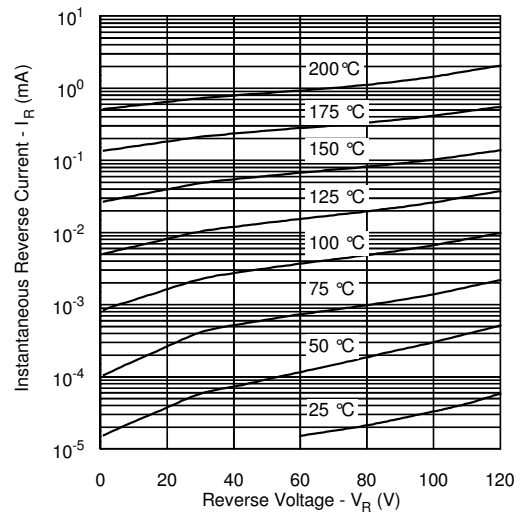


**SHD-4B**

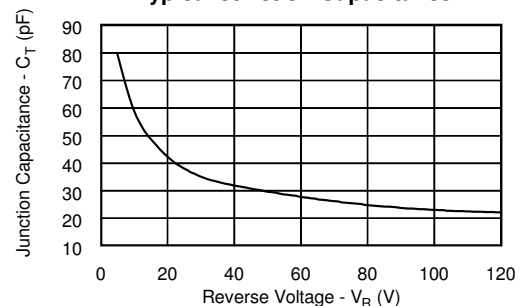
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**TECHNICAL DATA**

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