

TECHNICAL DATA
DATA SHEET 4573, REV. –

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HERMETIC POWER SCHOTTKY RECTIFIER
Low Forward Voltage Drop

Add Suffix "S" to Part Number for S-100 Screening.

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability

DESCRIPTION: A 200-VOLT, 15 AMP DUAL POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-4/4A/4B PACKAGE.

MAXIMUM RATINGS

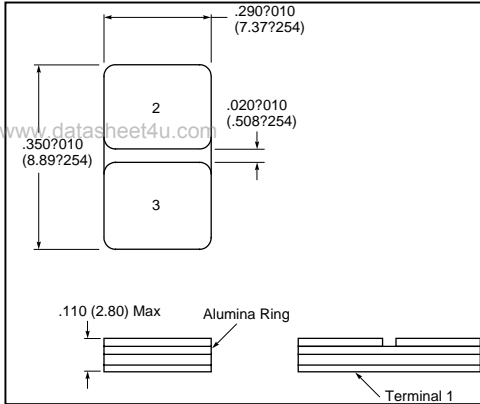
ALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

| RATING | SYMBOL | MAX. | UNITS |
|--|-----------------|-----------------|--------------------|
| PEAK INVERSE VOLTAGE | PIV | 200 | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$) | I_O | 15 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine) | I_{FSM} | 140 | Amps |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) | $R_{\theta JC}$ | 0.85 | $^\circ\text{C/W}$ |
| MAXIMUM OPERATING TEMPERATURE RANGE | Top/Tstg | -65 to + 200 | $^\circ\text{C}$ |
| MAXIMUM STORAGE TEMPERATURE RANGE | Top/Tstg | -65 to + 200 | $^\circ\text{C}$ |

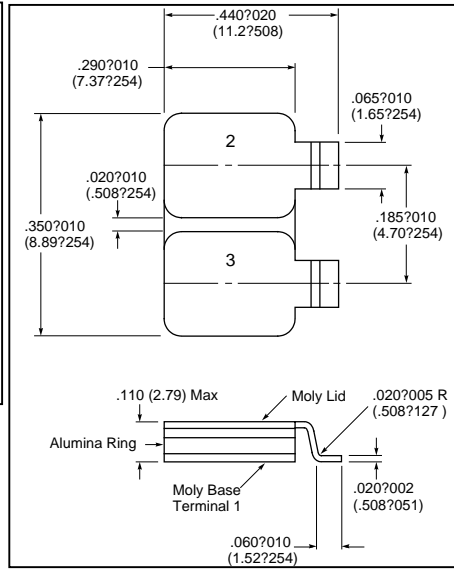
ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | MAX. | UNITS |
|---|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 7.5$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | V_f | 0.92 0.76 | Volts |
| MAXIMUM REVERSE CURRENT (I_r @ 200V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | I_r | 0.008 0.5 | mA |
| MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$) | C_T | 150 | pF |

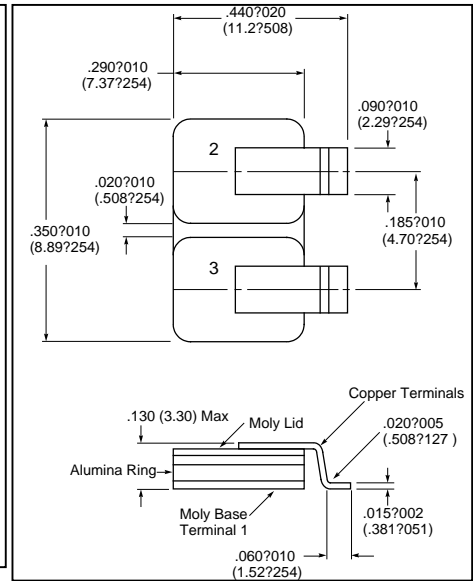
Mechanical Dimensions: In Inches / mm



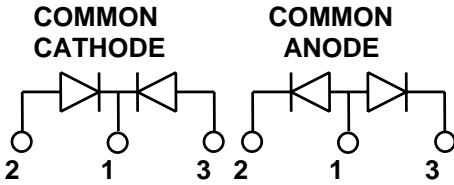
SHD-4



SHD-4A



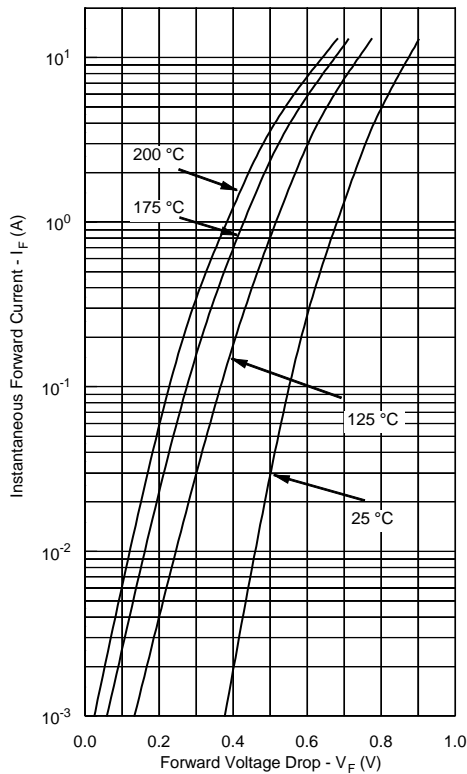
SHD-4B



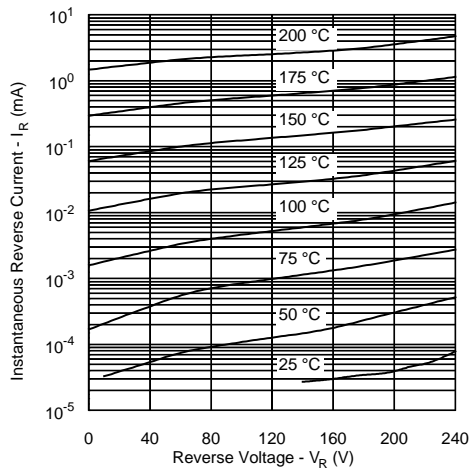
PINOUT TABLE

| DEVICE TYPE | PIN 1 | PIN 2 | PIN 3 |
|------------------------------------|----------------|-----------|-----------|
| DUAL RECTIFIER, COMMON CATHODE (P) | COMMON CATHODE | ANODE 1 | ANODE 2 |
| DUAL RECTIFIER, COMMON ANODE (N) | COMMON ANODE | CATHODE 1 | CATHODE 2 |

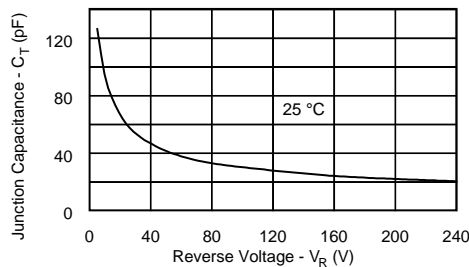
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



$V_F @ 1A -55^{\circ}C \text{ typical} = 0.56V$

TECHNICAL DATA

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