

TECHNICAL DATA
DATA SHEET 1082, REV. PRELIMINARY

ULTRA LOW REVERSE LEAKAGE POWER SCHOTTKY RECTIFIER
Very Low Voltage Drop

DESCRIPTION: A 100 VOLT, 60 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD5/5A/5B PACKAGE.

MAXIMUM RATINGS

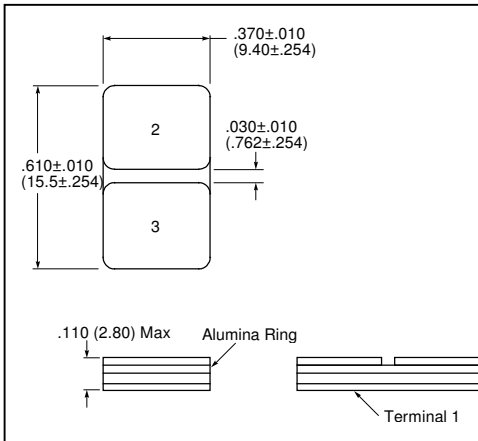
ALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

| 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 | 60 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine Wave) (per leg) | I_{FSM} | 570 | Amps |
| MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$) | C_T | 1000 | pF |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) | $R_{\theta JC}$ | 0.25 | $^\circ\text{C/W}$ |
| MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE | Top | -65 to + 175 | $^\circ\text{C}$ |

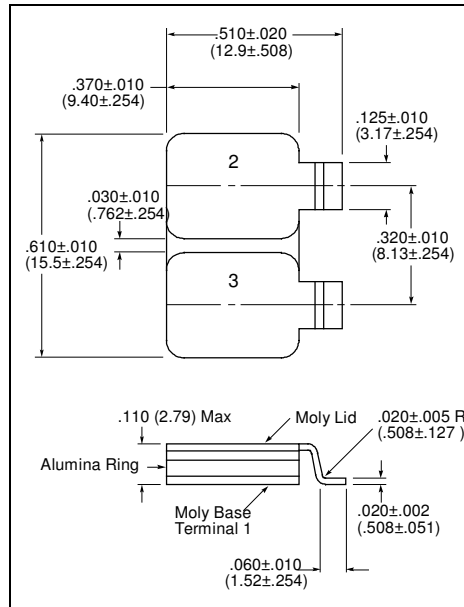
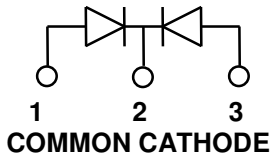
ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | MAX. | UNITS |
|--|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 30$ Amps) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | V_f | 0.84 0.68 | Volts |
| MAXIMUM REVERSE CURRENT ($I_r @ 100\text{V PIV}$) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | I_r | 0.2 2.0 | mA |

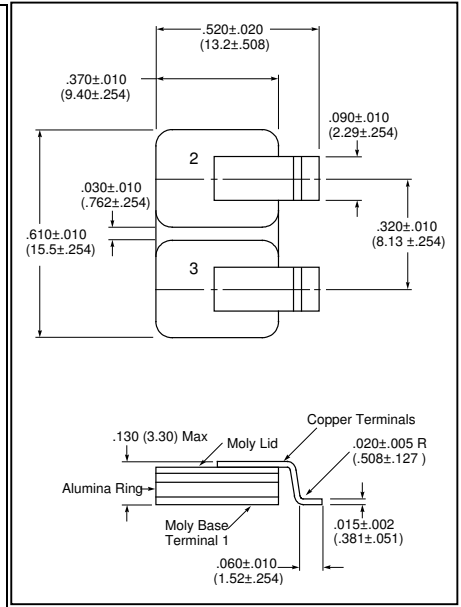
MECHANICAL DIMENSIONS: In Inches / mm



SHD-5



SHD-5A

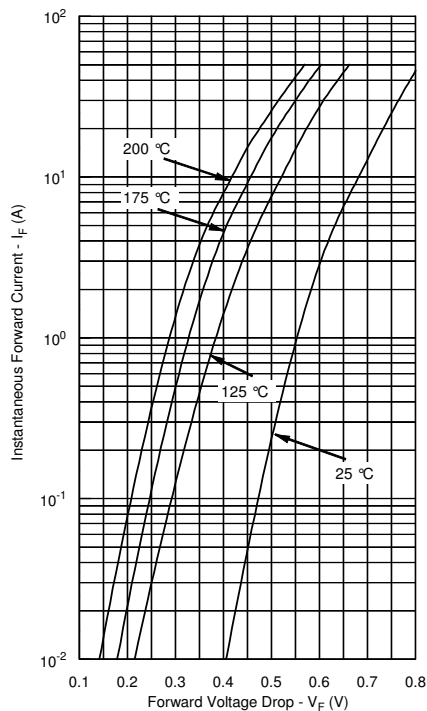


SHD-5B

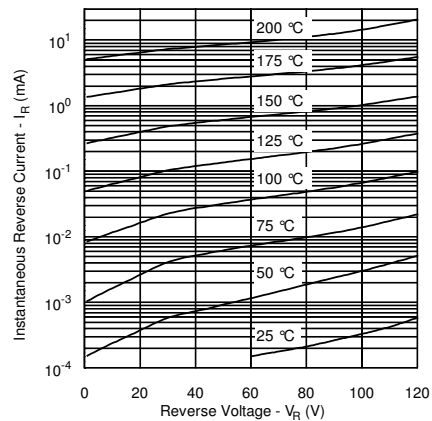
PINOUT TABLE

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

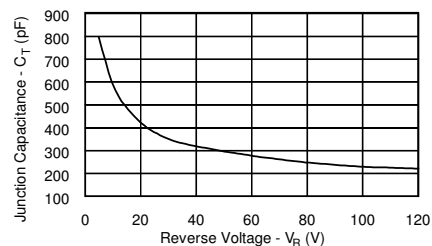
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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