# SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 379, REV. B

# HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

**DESCRIPTION:** 100 VOLT, 7.5 AMP, HERMETIC POWER SCHOTTKY RECTIFIER IN A SHD-1/1A/1B PACKAGE.

#### MAXIMUM RATINGS SPECIFIED.

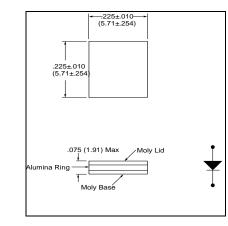
ALL RATINGS ARE @  $T_{\rm C}$  = 25 °C UNLESS OTHERWISE

| RATING  | SYMBOL           | MAX.            | UNITS |
|---|------------------|-----------------|-------|
| PEAK INVERSE VOLTAGE  | PIV              | 100             | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c$ =100 °C) | Ι <sub>ο</sub>   | 7.5             | Amps  |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT                         | I <sub>FSM</sub> | 140             | Amps  |
| (t=8.3ms, Sine)   |                  |                 |       |
| $MAXIMUM JUNCTION CAPACITANCE (V_r = 5V)$                           | CT               | 250             | pF    |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)  | $R\theta_{JC}$   | 3.2             | °C/W  |
| MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE                     | Top/Tstg         | -65 to<br>+ 200 | °C    |

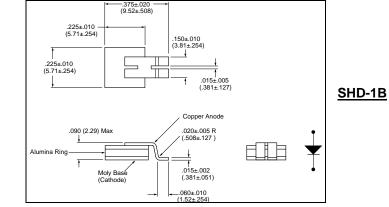
## **ELECTRICAL CHARACTERISTICS**

| CHARACTERISTIC                |                                       |                |      |       |
|-------------------------------|---------------------------------------|----------------|------|-------|
| MAXIMUM FORWARD VOLTAGE DRO   | P, Pulsed (I <sub>f</sub> = 7.5 Amps) |                |      |       |
|                               | T <sub>J</sub> = 25 °C                | V,             | 0.84 | Volts |
|                               | T <sub>J</sub> = 125 °C               | - 1            | 0.68 |       |
| MAXIMUM REVERSE CURRENT (I, @ | 2 100V PIV)                           |                |      |       |
|                               | T <sub>J</sub> = 25 °C                | l <sub>r</sub> | 0.18 | mA    |
|                               | T」= 125 °C                            |                | 4.0  |       |

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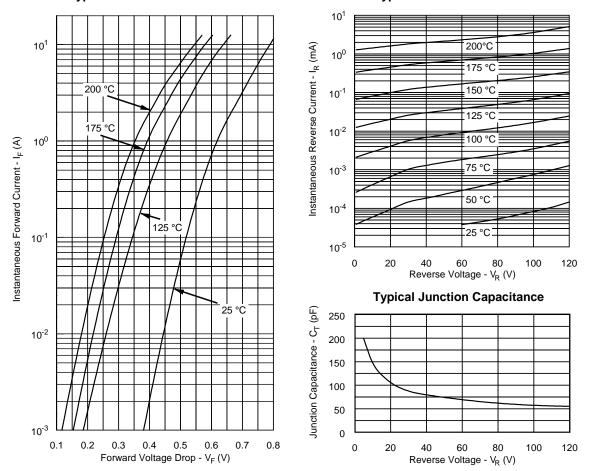


#### **MECHANICAL DIMENSIONS: In Inches / mm**



SHD-1





**Typical Reverse Characteristics** 

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