

TECHNICAL DATA DATA SHEET 4575, REV. –

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

#### **MAXIMUM RATINGS**

ALL RATINGS ARE @  $T_C$  = 25 °C UNLESS OTHERWISE SPECIFIED.

| RATING   | SYMBOL           | MAX.            | UNITS |
|--|------------------|-----------------|-------|
| PEAK INVERSE VOLTAGE   | PIV              | 15              | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C$ =70 $^{\circ}$ C) | Io               | 15              | Amps  |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)                  | I <sub>FSM</sub> | 140             | Amps  |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)           | $R_{	heta JC}$   | 0.85            | °C/W  |
| MAXIMUM OPERATING TEMPERATURE RANGE  | Top/Tstg         | -65 to<br>+ 100 | °C    |
| MAXIMUM STORAGE TEMPERATURE RANGE  | Top/Tstg         | -65 to<br>+ 100 | °C    |

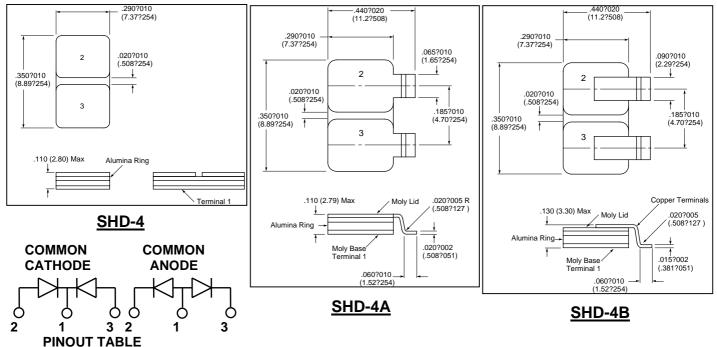
#### **ELECTRICAL CHARACTERISTICS**

| CHARACTERISTIC   |                     | SYMBOL         | MAX.         | UNITS |
|--|---------------------|----------------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 7.5 Amps) |                     |                |              |       |
| T <sub>J</sub> = 25 °C<br>T <sub>J</sub> = 75 °C                 |                     | $V_{f}$        | 0.37<br>0.33 | Volts |
| MAXIMUM REVERSE CURRENT (Ir @ 15V PIV)                           |                     |                |              |       |
| T <sub>J</sub> = 25 °C<br>T <sub>J</sub> = 100 °C                |                     | l <sub>r</sub> | 3.5<br>170   | mA    |
| MAXIMUM JUNCTION CAPACITANCE (V                                  | V <sub>r</sub> =5V) | $C_T$          | 600          | pF    |

### **SENSITRON**

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### Mechanical Dimensions: In Inches / mm



| 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 |



#### **TECHNICAL DATA**

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