TECHNICAL DATA DATA SHEET 382, REV. B.1

# HERMETIC POWER SCHOTTKY RECTIFIER 175°C Maximum Operation Temperature

**DESCRIPTION:** A 45 VOLT, 35 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE. *Add suffix "SS" for Space Level Screening.* 

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

| RATING   | SYMBOL              | MAX.            | UNITS |
|--|---------------------|-----------------|-------|
| PEAK INVERSE VOLTAGE   | PIV                 | 45              | Volts |
| MAXIMUM DC OUTPUT CURRENT (T <sub>c</sub> =100 <sup>o</sup> C)<br>(SINGLE)         | Ι <sub>ο</sub>      | 30              | Amps  |
| MAXIMUM DC OUTPUT CURRENT (T <sub>c</sub> =100 <sup>o</sup> C)<br>(COMMON CATHODE) | Ι <sub>Ο</sub>      | 35              | Amps  |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT<br>(t=8.3ms, Sine) (per leg)           | I <sub>FSM</sub>    | 150             | Amps  |
| MAXIMUM JUNCTION CAPACITANCE ( $V_R = 5V$ ) (per leg)                              | CT                  | 1600            | pF    |
| MAXIMUM THERMAL RESISTANCE PER LEG   | $R_{	ext{	heta}JC}$ | 1.5             | °C/W  |
| MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE                                    | Top/Tstg            | -65 to<br>+ 175 | °C    |

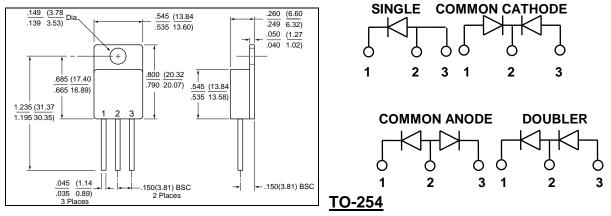
## ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC   | SYMBOL         | MAX. | UNITS |
|--|----------------|------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed $(I_f = 30 \text{ Amps})$ (per leg) |                |      |       |
| T <sub>J</sub> = 25 °C   | V <sub>f</sub> | 0.81 | Volts |
| T <sub>J</sub> = 125 °C  | - 1            | 0.74 |       |
| MAXIMUM REVERSE CURRENT (Ir @ PIV) (per leg)                             |                |      |       |
| T <sub>J</sub> = 25 °C   | l <sub>r</sub> | 0.8  | mA    |
| T <sub>J</sub> = 125 °C  |                | 30   |       |

### SENSITRON

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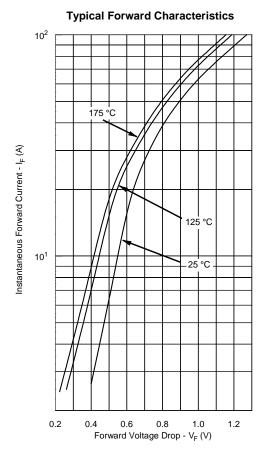
#### **MECHANICAL DIMENSIONS: In Inches / mm**



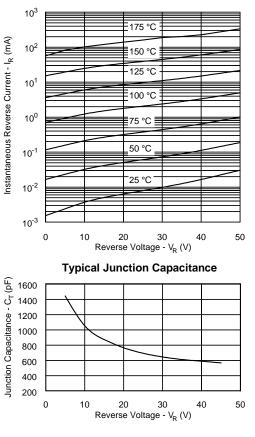
#### PINOUT TABLE

| PIN 1     | PIN 2                           | PIN 3  |
|-----------|---------------------------------|--|
| CATHODE   | ANODE                           | ANODE  |
| ANODE 1   | COMMON CATHODE                  | ANODE 2  |
| CATHODE 1 | COMMON ANODE                    | CATHODE 2  |
| ANODE     | ANODE/CATHODE                   | CATHODE  |
|           | CATHODE<br>ANODE 1<br>CATHODE 1 | CATHODEANODEANODE 1COMMON CATHODECATHODE 1COMMON ANODE |

Curves are given for unpackaged die.







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