<u>SENSITRON</u> SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 4558, REV. C

# HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

# Applications:

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

# Features:

- Very Low Forward Voltage Drop
- High Efficiency
- High Frequency Application
- Guard Ring for Enhanced Durability and Long Term Reliability

## **MAXIMUM RATINGS**

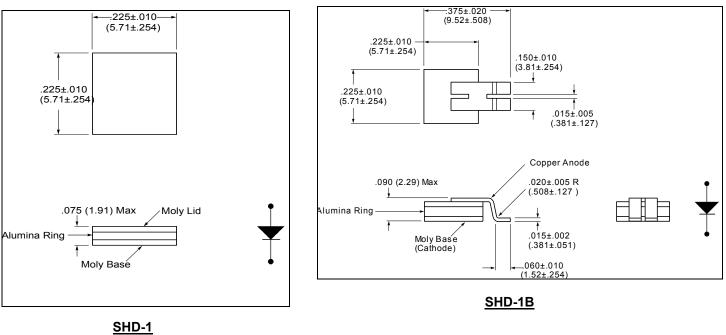
#### ALL RATINGS ARE @ T<sub>c</sub> = 25 °C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	15	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c$ =70 $^{\circ}$ C)	Ι <sub>ο</sub>	3.0	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I <sub>FSM</sub>	55	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{ ext{ heta}JC}$	7.07	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	Тор	-65 to + 175	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C

# **ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC		SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 3 \text{ Amps}$ )				
T <sub>J</sub> = 25 °C T <sub>J</sub> = 75 °C		$V_{\rm f}$	0.37 0.33	Volts
MAXIMUM REVERSE CURRENT (Ir @ 15V PIV)				
T <sub>J</sub> = 25 °C T <sub>J</sub> = 100 °C		I <sub>r</sub>	1.5 70	mA
MAXIMUM JUNCTION CAPACITANCE	(V <sub>r</sub> =5V)	C <sub>T</sub>	240	pF

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

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