

**SENSITRON**  
**SEMICONDUCTOR**TECHNICAL DATA  
DATA SHEET 864, 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 @  $T_C = 25\text{ }^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

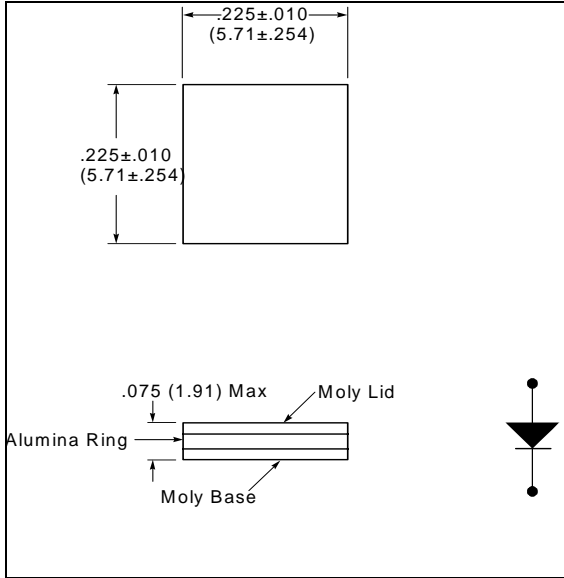
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	15	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=70\text{ }^\circ\text{C}$ )	$I_o$	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ , Sine)	$I_{FSM}$	280	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	1.70	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	$T_{op}$	-55 to + 100	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	$T_{stg}$	-55 to + 100	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

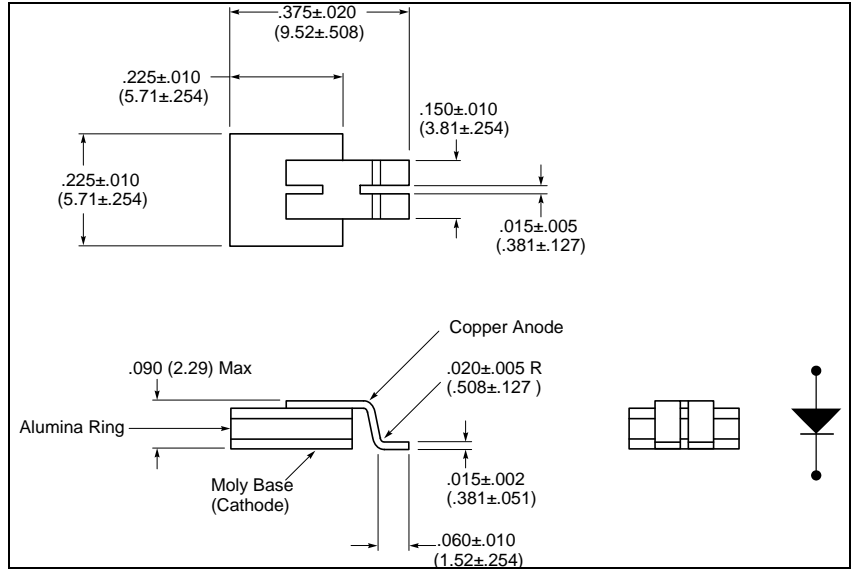
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 15\text{ Amps}$ ) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 75\text{ }^\circ\text{C}$	$V_f$	0.37 0.33	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 15V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 100\text{ }^\circ\text{C}$	$I_r$	7.0 340	mA
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	1200	pF

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**MECHANICAL DIMENSIONS: In Inches / mm**



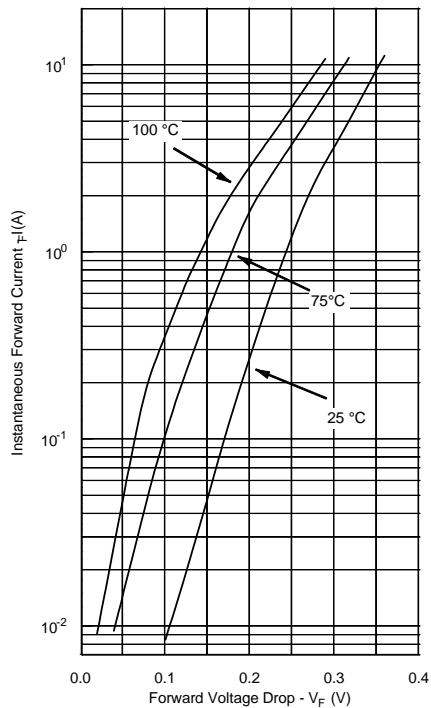
**SHD-1**



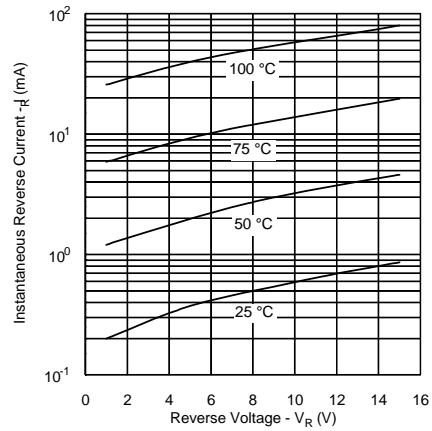
**SHD-1B**

Note: The Vf curves are for bare die only

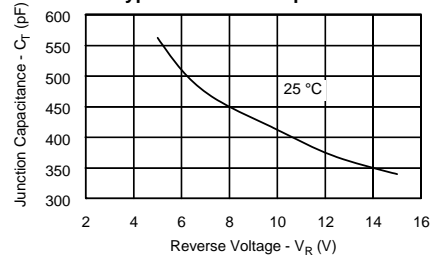
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**SENSITRON**

**TECHNICAL DATA**

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