TECHNICAL DATA DATA SHEET 629, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER Ultra Low Reverse Leakage 200°C Operating Temperature

DESCRIPTION: 100 VOLT, 15 AMP, POWER SCHOTTKY RECTIFIER IN A SHD-1/1A/1B PACKAGE.

#### **MAXIMUM RATINGS**

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T <sub>C</sub> =100 <sup>O</sup> C)	Io	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I <sub>FSM</sub>	280	Amps
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V)	C <sub>T</sub>	500	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{ heta JC}$	0.85	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	Тор	-65 to + 200	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C

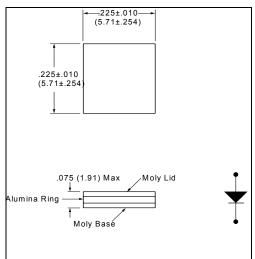
# **ELECTRICAL CHARACTERISTICS**

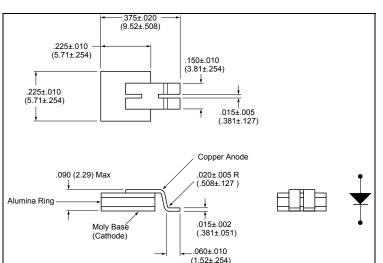
CHARACTERISTIC				
MAXIMUM FORWARD VOLTAGE DROP, F	Pulsed (I <sub>f</sub> = 15 Amps)			
	T <sub>J</sub> = 25 °C	$V_{f}$	.84	Volts
	T <sub>J</sub> = 125 °C	- 1	.68	
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 100V PIV)				
	T <sub>J</sub> = 25 °C	I <sub>r</sub>	.01	mA
	T <sub>J</sub> = 125 °C		1.0	

SHD-1B

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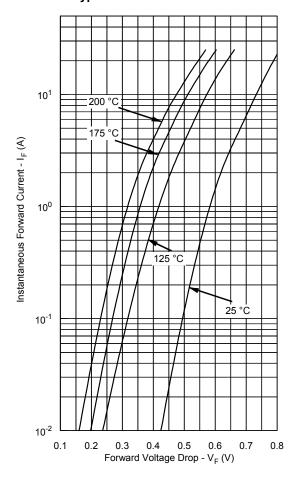
#### **MECHANICAL DIMENSIONS: In Inches / mm**



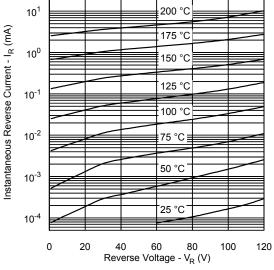


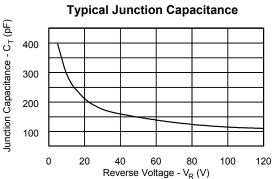
SHD-1

### **Typical Forward Characteristics**



#### **Typical Reverse Characteristics**





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