

TECHNICAL DATA  
DATA SHEET 333, REV. C

## ULTRA LOW REVERSE LEAKAGE POWER SCHOTTKY RECTIFIER Very Low Voltage Drop

**DESCRIPTION:** 100 VOLT, 3.0 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-1/B PACKAGE.

### MAXIMUM RATINGS

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

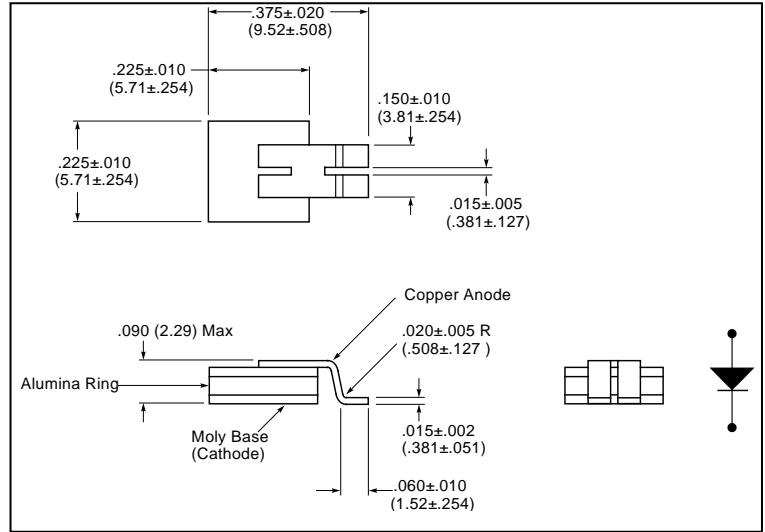
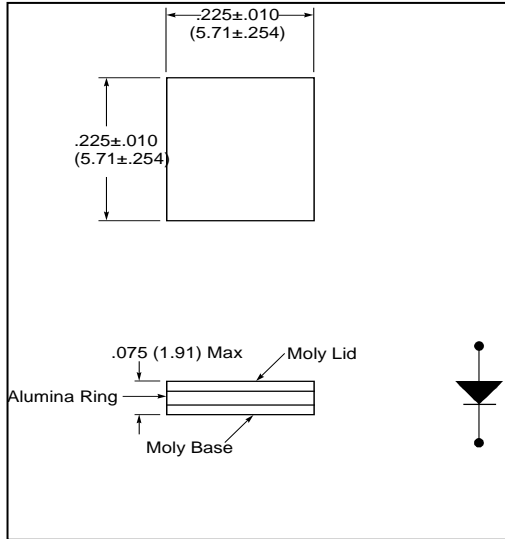
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$ )	$I_O$	3.0	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	55	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r = 5\text{V}$ ) (per leg)	$C_T$	100	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	7.07	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top	-65 to + 200	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 3.0\text{ Amps}$ ) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$V_f$	0.84 0.68	Volts
MAXIMUM REVERSE CURRENT ( $I_r @ 100\text{V PIV}$ ) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$I_r$	0.025 0.25	mA

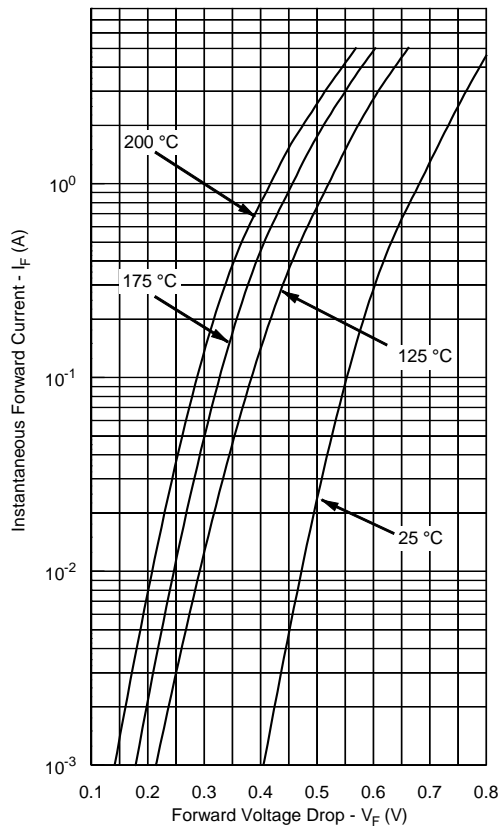
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**MECHANICAL DIMENSIONS: In Inches / mm**



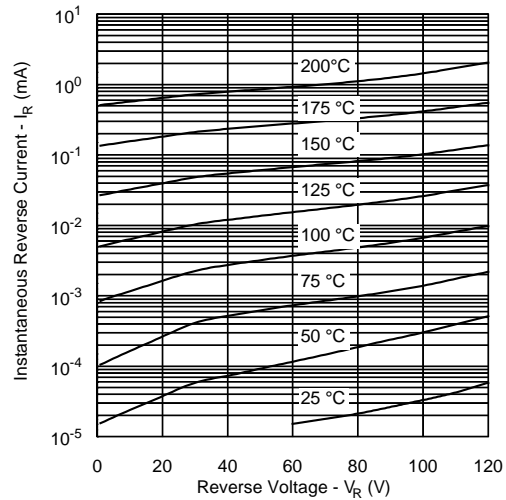
**SHD-1**

**Typical Forward Characteristics**

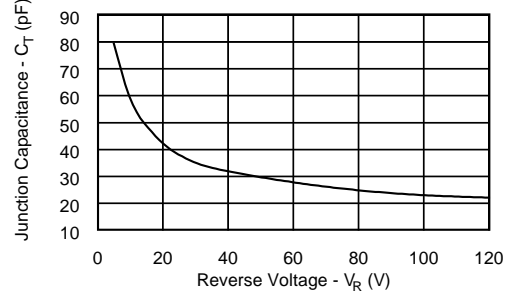


**SHD-1B**

**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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