

TECHNICAL DATA  
DATA SHEET 5222, REV. A

## HERMETIC POWER SCHOTTKY RECTIFIER Low Forward Voltage Drop

### Applications:

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

### Features:

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

### MAXIMUM RATINGS

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

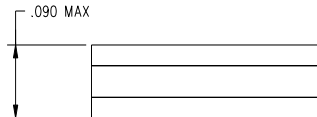
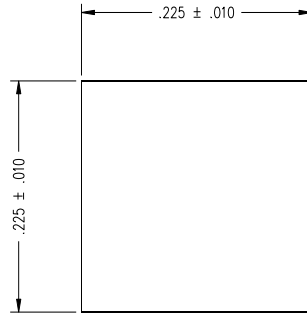
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )	$I_O$	7.5	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ , Sine)	$I_{FSM}$	140	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	3.2	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	$T_{op}$	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	$T_{stg}$	-65 to + 175	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

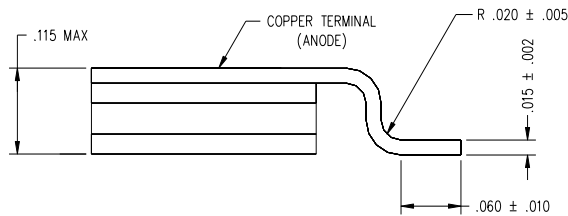
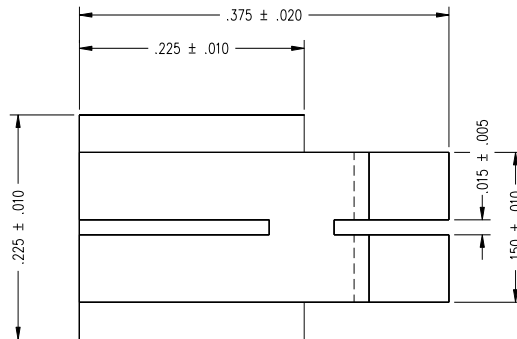
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 7.5$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.92 0.76	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 20V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	0.18 4.0	mA
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	150	pF

MECHANICAL DIMENSIONS: In Inches / mm

**SHD-1 HIGH PROFILE**



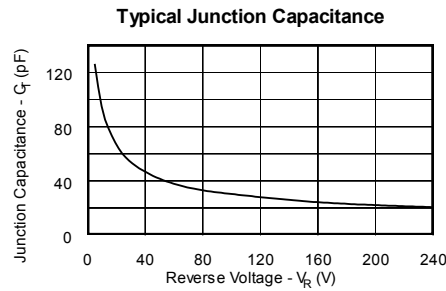
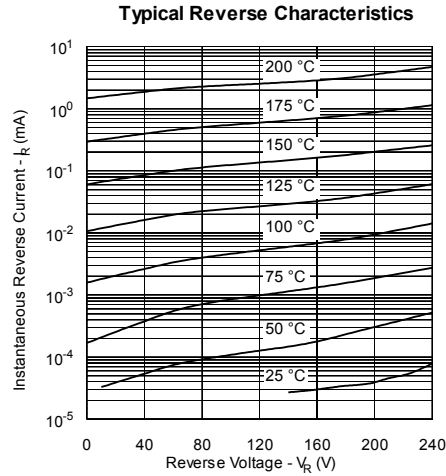
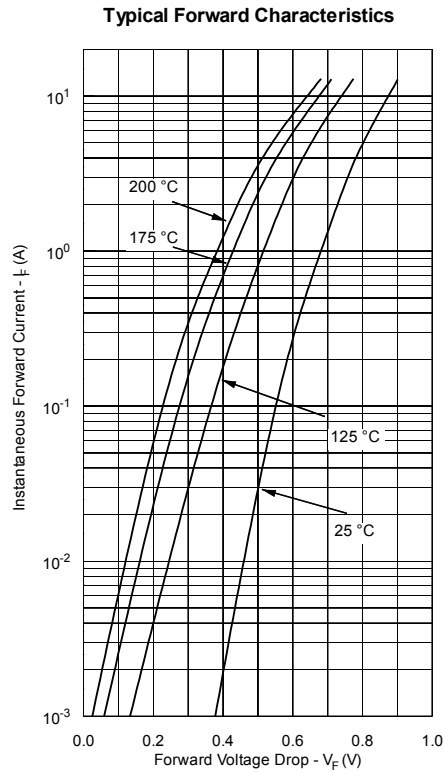
**SHD-1B HIGH PROFILE**



**PINOUT TABLE**

TYPE	PIN 1 (Base)	PIN 2
SINGLE RECTIFIER in a Surface Mount Package	CATHODE	ANODE

**SENSITRON**  
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