

TECHNICAL DATA  
DATA SHEET 6051, REV. A

**HERMETIC POWER SCHOTTKY RECTIFIER**  
**200°C Maximum Operation Temperature**

**DESCRIPTION:** 100 VOLT, 30 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-2HP / 2B HP PACKAGE.

**MAXIMUM RATINGS**

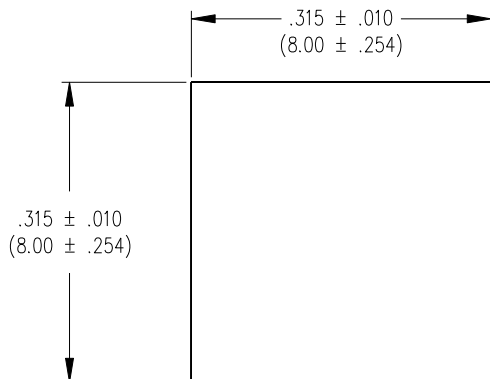
ALL RATINGS ARE @  $T_c = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c=100^\circ\text{C}$ )	$I_o$	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ , Sine)	$I_{FSM}$	570	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	1200	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	0.9	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to +200	$^\circ\text{C}$

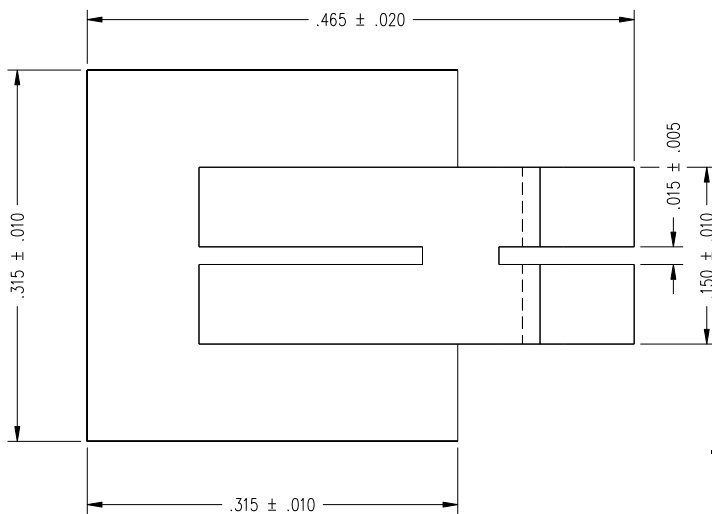
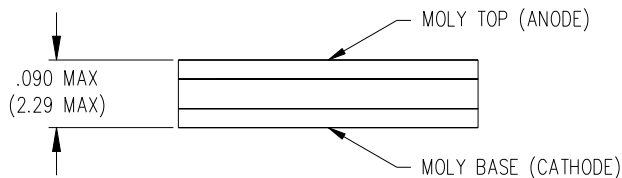
**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (per leg, $I_f = 30$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.84 0.68	Volts
MAXIMUM REVERSE CURRENT (per leg, $I_r$ @ 100 V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	0.75 15	mA

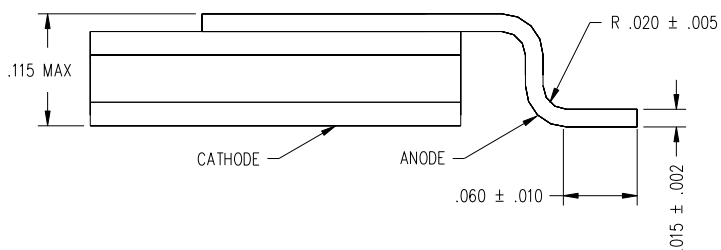
MECHANICAL DIMENSIONS: In Inches / mm



**SHD-2 High Profile**

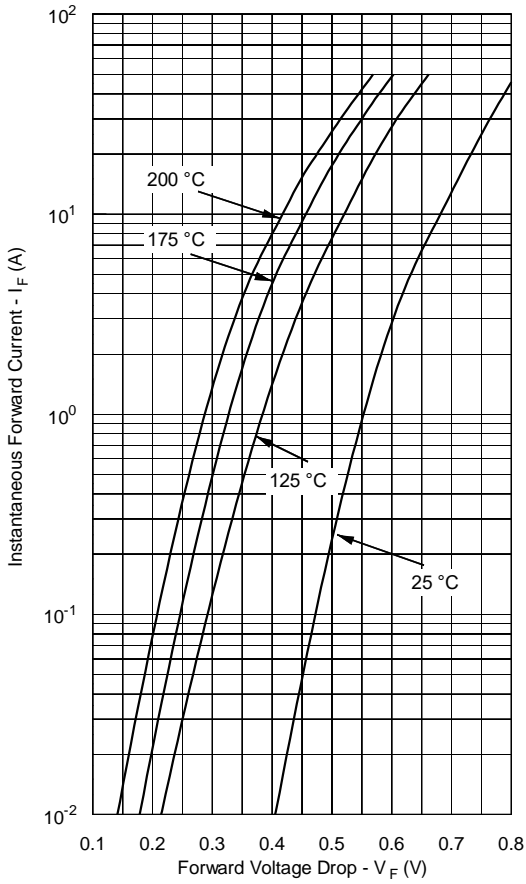


**SHD-2B High Profile**

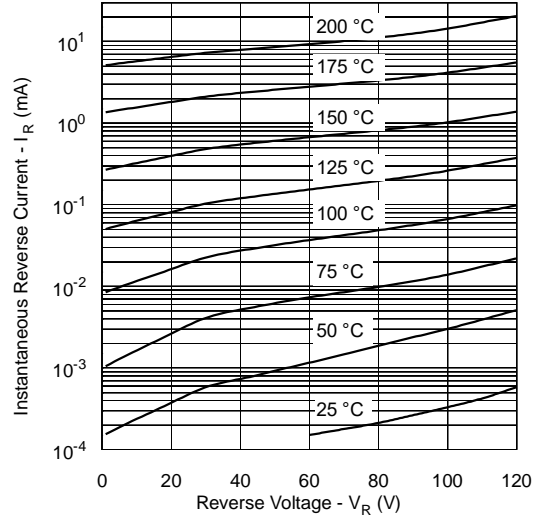


**SENSITRON**  
**DATA SHEET 6051, REV. A**

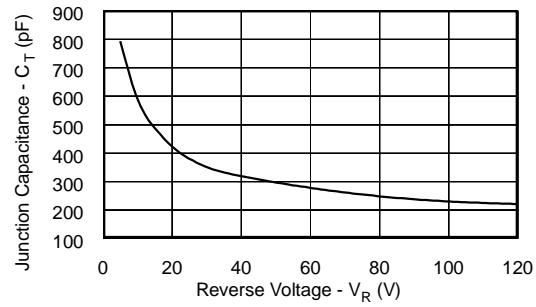
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**PIN OUT TABLE**

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

**PART ORDERING INFORMATION:**

**SHD175444B XX X**

↓  
Part Number

**Screening Level (blank is no screening):**

Suffix	Screened in Accordance with:
blank	No screening level
S	MIL-PRF-19500, TXV Level
SS	MIL-PRF-19500, S Level

**QCI (blank is no QCI):**

Suffix	Inspection in Accordance with:
blank	No QCI
Q	MIL-PRF-19500 QCI

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