

TECHNICAL DATA  
DATA SHEET 5021, REV. -

## HERMETIC POWER ULTRAFAST RECTIFIER

**DESCRIPTION:** A 600 VOLT, 30 AMP, 50 NANOSECOND HERMETIC POWER ULTRAFAST RECTIFIER IN A SHD-2 / 2B HIGH PROFILE PACKAGE.

### MAXIMUM RATINGS

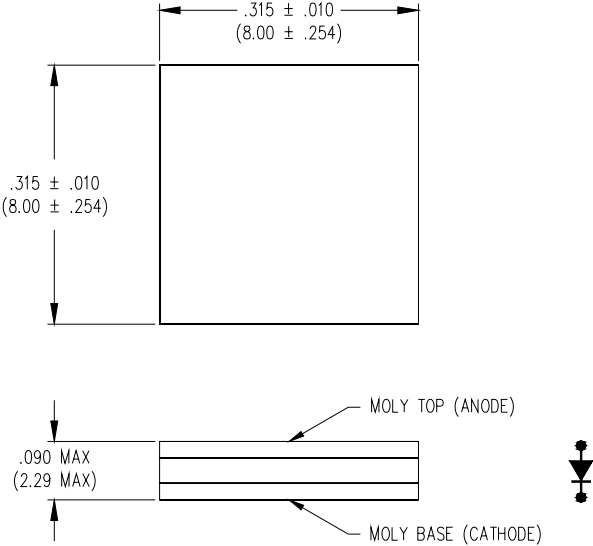
ALL RATINGS ARE @  $T_A = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	600	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )	$I_o$	30	Amps
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$ )	$t_{rr}$	50	ns
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	.45	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-55 to +175	$^\circ\text{C}$

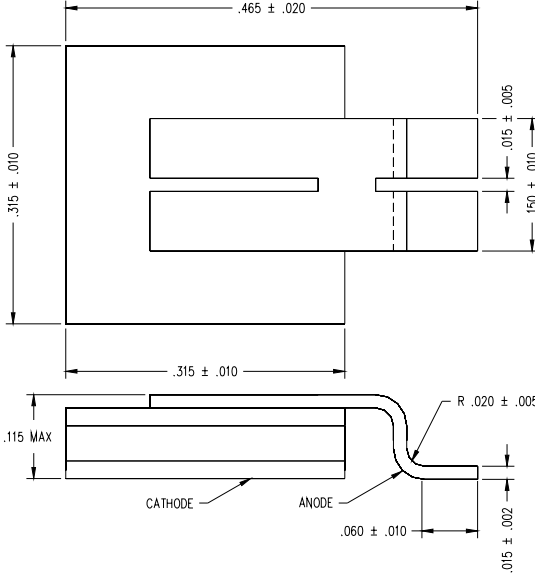
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 25^\circ\text{C}$ ( $I_f = 30\text{Amps}$ )	$V_f$	1.80	Volts
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 125^\circ\text{C}$ ( $I_f = 30\text{Amps}$ )	$V_f$	1.70	Volts
MAXIMUM REVERSE CURRENT $T_C = 25^\circ\text{C}$ $I_{rr}$ @ 600 PIV	$I_{rr}$	25	$\mu\text{A}$
MAXIMUM REVERSE CURRENT $T_C = 125^\circ\text{C}$ $I_{rr}$ @ 600 PIV	$I_{rr}$	1.0	mA

MECHANICAL DIMENSIONS: In Inches / mm



**SHD-2 HP**



**SHD-2B HP**

**SENSITRON**

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