

TECHNICAL DATA  
DATA SHEET 5105, REV. A

## HERMETIC POWER ULTRAFAST RECTIFIER

**DESCRIPTION:** A 200 VOLT, 25 AMP, HERMETIC POWER ULTRAFAST RECTIFIER IN A SHD-1/1B HP PACKAGE.

### MAXIMUM RATINGS

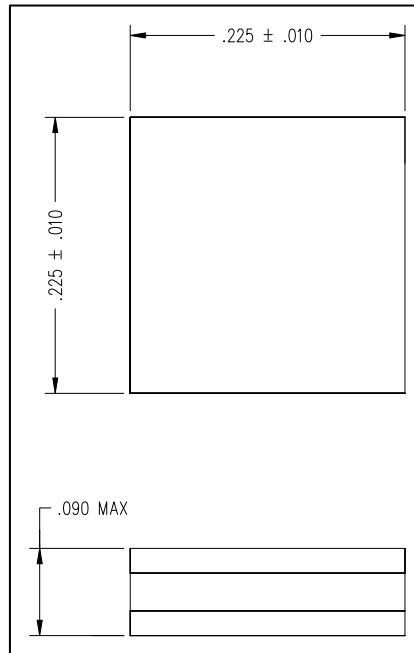
All ratings are @  $T_A = 25^\circ\text{C}$  unless otherwise specified

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )	$I_O$	25	Amps
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$ )	$t_{rr}$	35	nsec
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	0.6	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-55 to + 150	$^\circ\text{C}$

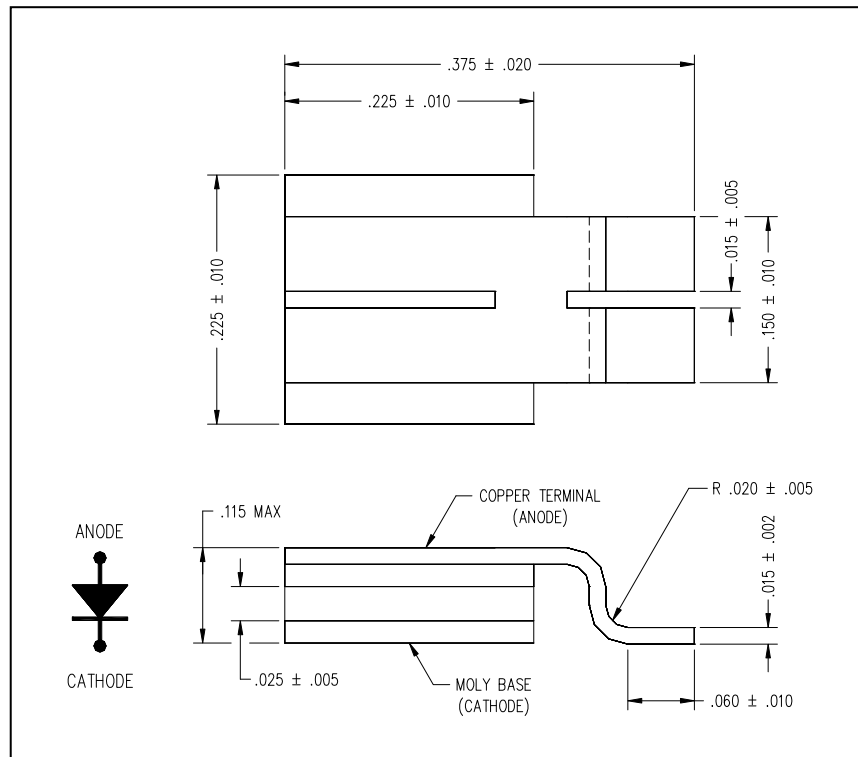
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 25^\circ\text{C}$ ( $I_f = 25\text{Amps}$ )	$V_f$	1.06	Volts
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 125^\circ\text{C}$ ( $I_f = 25\text{Amps}$ )	$V_f$	0.98	Volts
MAXIMUM REVERSE CURRENT $T_C = 25^\circ\text{C}$ $I_r$ @ 200 PIV	$I_r$	25	$\mu\text{A}$
MAXIMUM REVERSE CURRENT $T_C = 125^\circ\text{C}$ $I_r$ @ 200 PIV	$I_r$	1.0	mA
CAPACITANCE $c = 25^\circ\text{C}$ $V_r = 10\text{V}$ , $f = 1\text{MHz}$	$C_T$	160	pF

**MECHANICAL DIMENSIONS: In Inches / mm**



**SHD-1 HP**



**SHD-1B HP**

**SENSITRON**  
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