

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

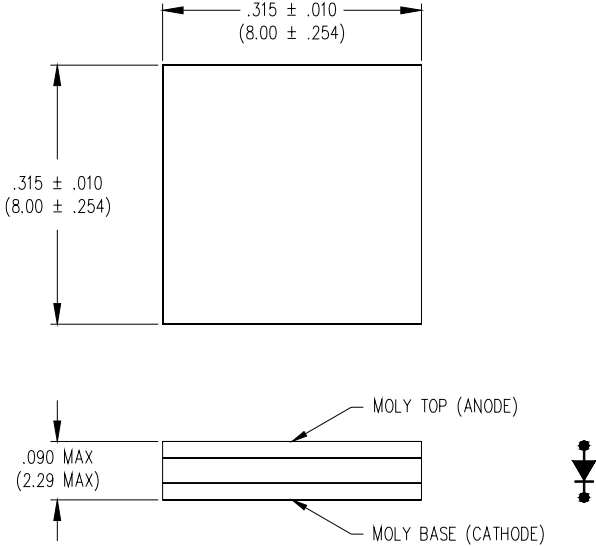
ALL RATINGS ARE @ $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

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	$^\circ\text{C}$

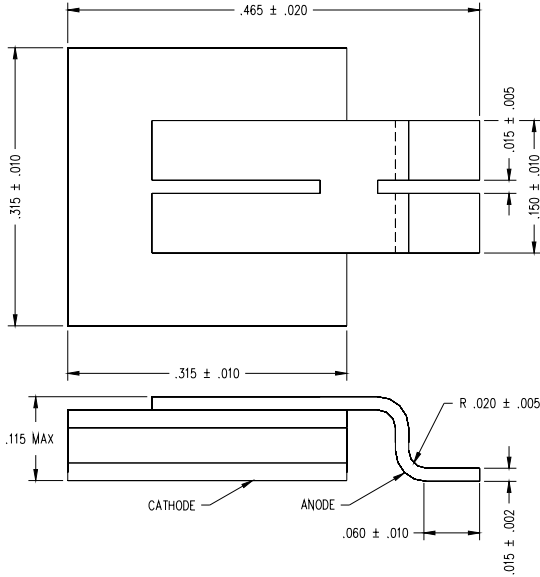
ELECTRICAL CHARACTERISTICS

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	μA
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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