

TECHNICAL DATA
DATA SHEET 4153, REV. B

HERMETIC POWER ULTRAFAST RECTIFIER

DESCRIPTION: A 400 VOLT, 70 AMP, 60 NANOSECOND POWER ULTRAFAST RECTIFIER IN A HERMETIC SHD-2 / 2A / 2B PACKAGE.

- ADD AN "S" TO THE END OF THE PART NUMBER FOR S-100 SCREENING
- R denotes Reverse Polarity – Moly base is Anode, Tab is Cathode

MAXIMUM RATINGS

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	400	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$)	I_O	70	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$		$^\circ\text{C/W}$
Standard Polarity (Cathode base)		0.48	
Reverse Polarity (Anode base)		0.60	
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-55 to +175	$^\circ\text{C}$

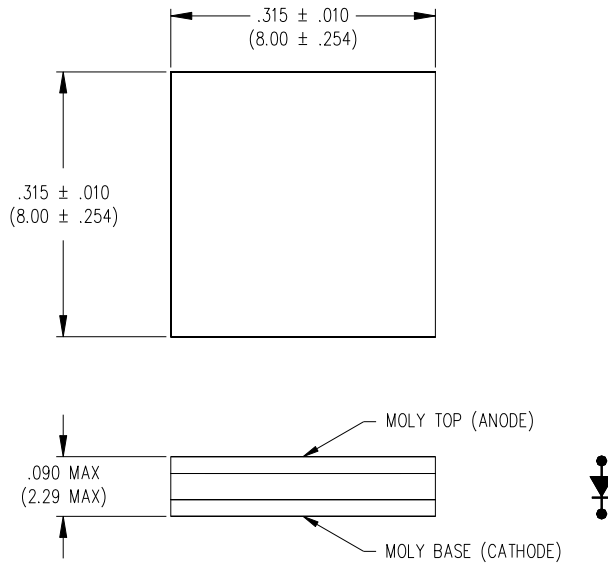
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 25\text{ }^\circ\text{C}$ ($I_f = 70\text{ Amps}$)	V_f	1.35	Volts
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 125\text{ }^\circ\text{C}$ ($I_f = 70\text{ Amps}$)	V_f	1.25	Volts
MAXIMUM REVERSE CURRENT $T_C = 25\text{ }^\circ\text{C}$ I_{rr} @ 400 PIV	I_{rr}	100	μA
MAXIMUM REVERSE CURRENT $T_C = 125\text{ }^\circ\text{C}$ I_{rr} @ 400 PIV	I_{rr}	2.0	mA
MAXIMUM REVERSE RECOVERY TIME ($I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$)	t_{rr}	60	ns

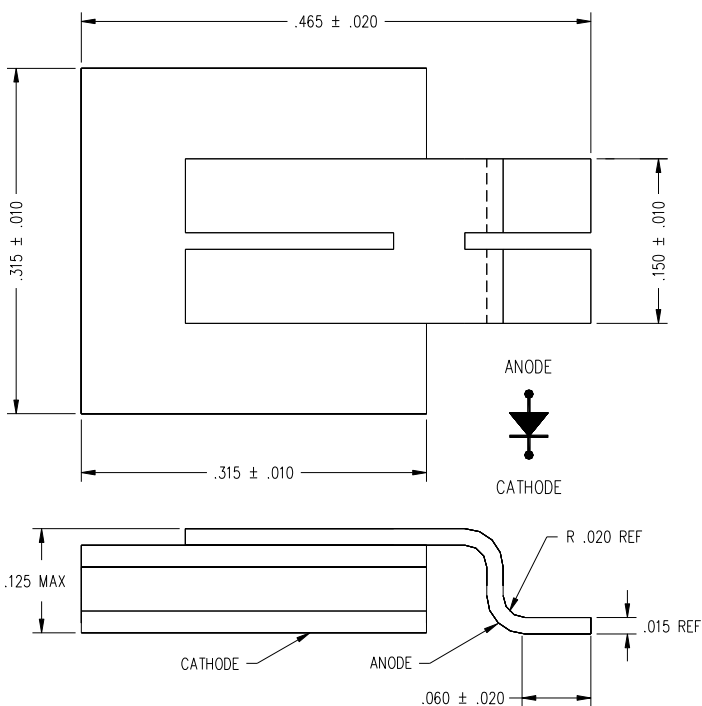
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MECHANICAL DIMENSIONS: In Inches / mm

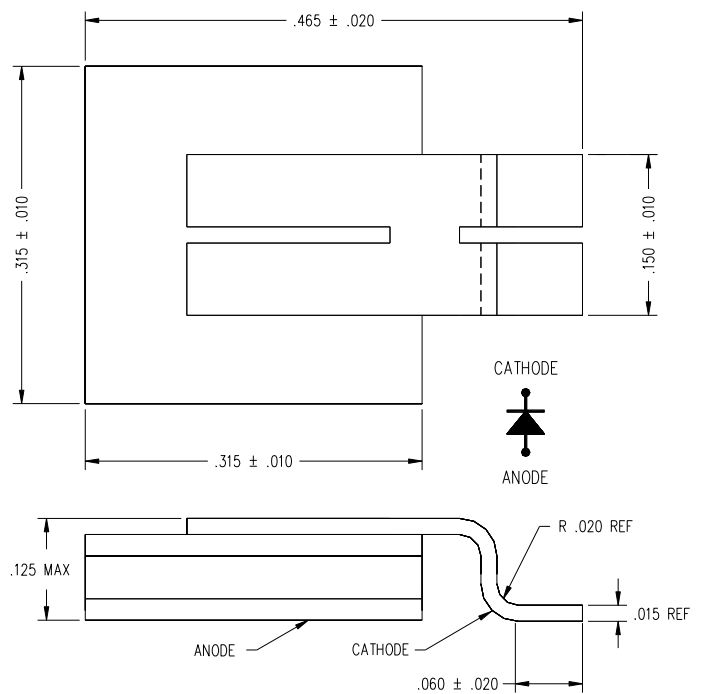
SHD375612 OUTLINE



SHD375612B OUTLINE



SHD375612BR OUTLINE



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