

DATA SHEET 4048, REV. D  
Formerly SHD1142

## HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

**DESCRIPTION:** A 45-VOLT, 120 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC CERAMIC SHD-3/3B PACKAGE.

### MAXIMUM RATINGS

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

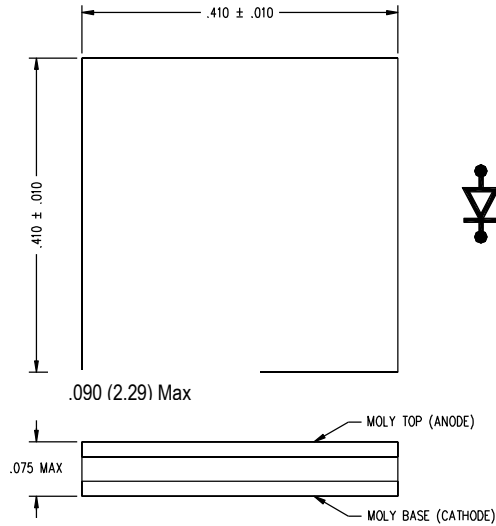
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$ )	$I_O$	120	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	1650	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	4800	pF
MAXIMUM THERMAL RESISTANCE	$R_{\theta JC}$	0.38	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

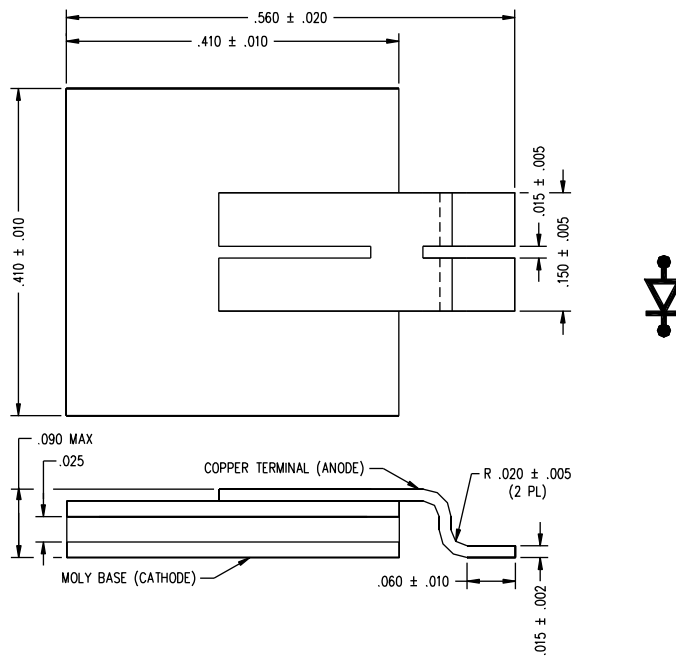
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 120\text{ Amps}$ ) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$V_f$	0.66 0.59	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 45V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$I_r$	2.4 90	mA

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MECHANICAL DIMENSIONS: In Inches / mm



**SHD-3**



**SHD-3B**

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