

TECHNICAL DATA
DATA SHEET 4032, REV. A

HERMETIC SCHOTTKY POWER RECTIFIER Low Voltage Drop

DESCRIPTION: A 45-VOLT, 7.5 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-1/1A/1B PACKAGE.

MAXIMUM RATINGS

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

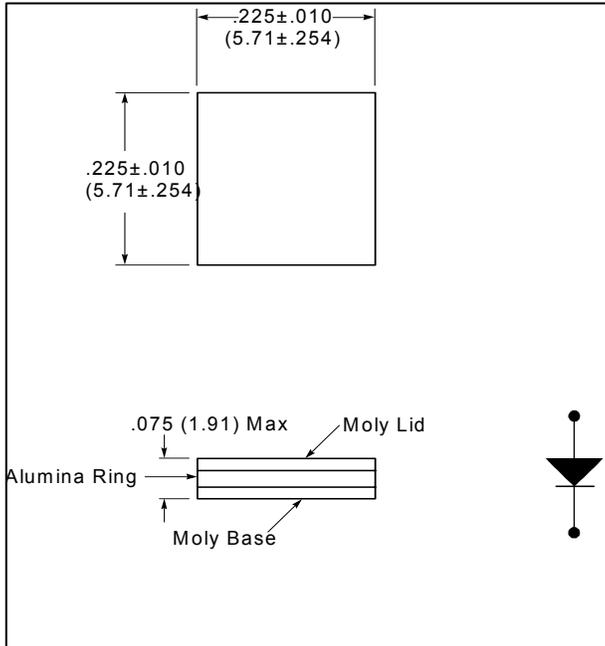
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C = 100\text{ }^\circ\text{C}$)	I_O	7.5	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t = 8.3\text{ms}$, Sine)	I_{FSM}	140	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r = 5\text{V}$)	C_T	400	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	1.7	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

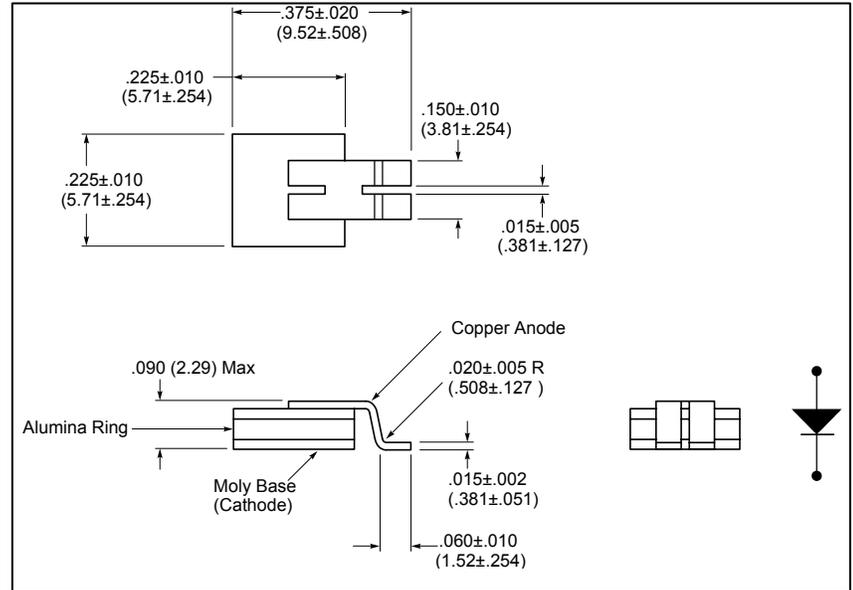
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 7.5\text{ Amps}$) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	V_f	0.64 0.57	Volts
MAXIMUM REVERSE CURRENT (I_r @ 45V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	I_r	0.2 7.5	mA

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MECHANICAL DIMENSIONS: In Inches / mm



SHD-1



SHD-1B

PINOUT TABLE

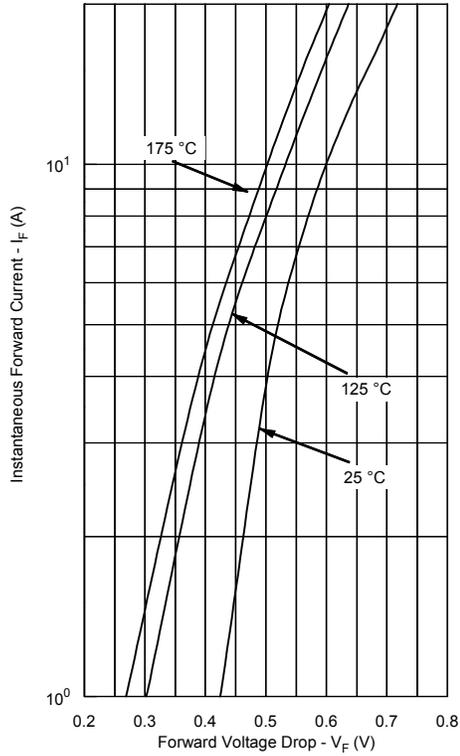
TYPE	PIN 1 (Base)	PIN 2
SINGLE RECTIFIER in a Surface Mount Package	CATHODE	ANODE

DISCLAIMER:

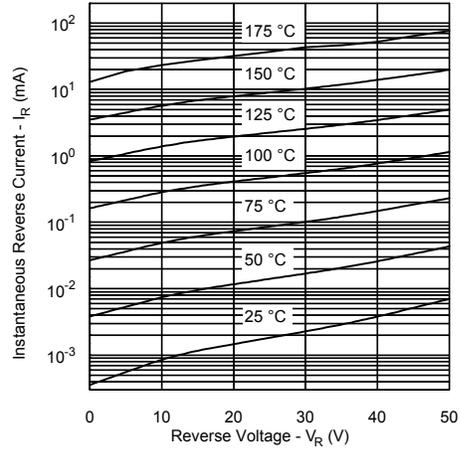
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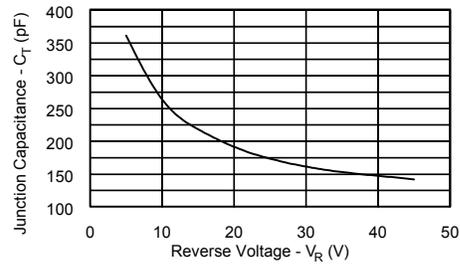
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



$V_F @ 1A -55^\circ C \text{ typical} = 0.52V$