

TECHNICAL DATA
DATA SHEET 630, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER
Very Low Voltage Drop

DESCRIPTION: 45 VOLT, 3.0 AMP, POWER SCHOTTKY RECTIFIER IN A SHD-1/1B PACKAGE.

MAXIMUM RATINGS

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

RATING / CONDITION	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c = 100^\circ\text{C}$)	I_o	3.0	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	55	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r = 5\text{V}$)	C_T	160	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	3.7	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC				
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 3.0 \text{ Amps}$) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.56 0.51	Volts	
MAXIMUM REVERSE CURRENT (I_r @ 45V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.3 14	mA	

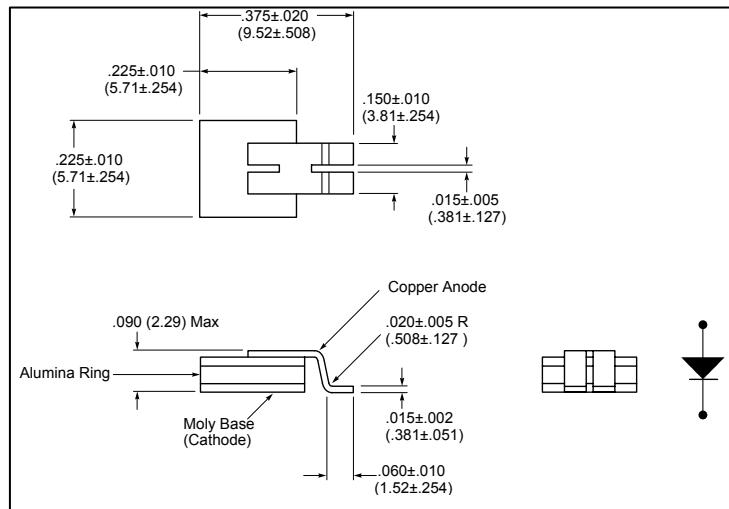
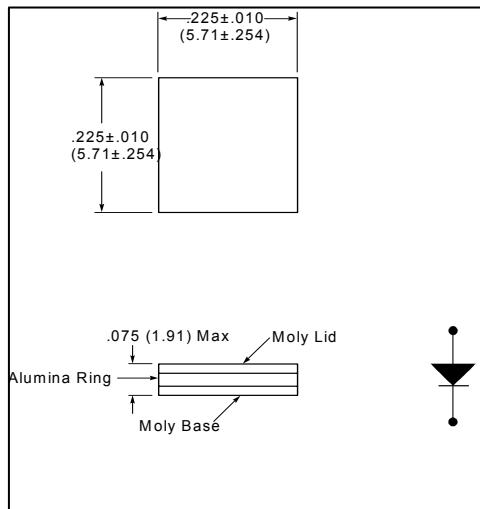
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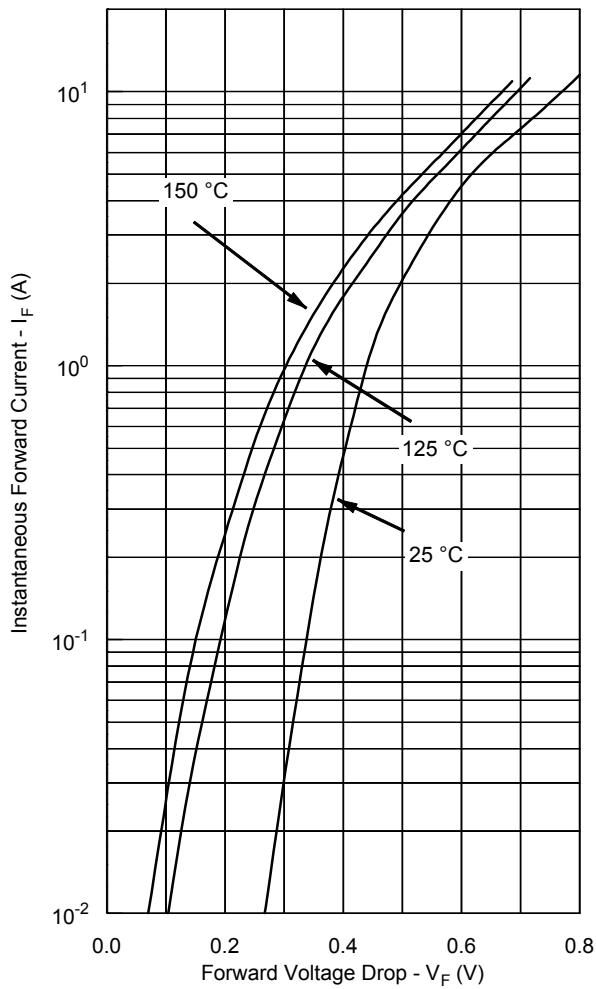
MECHANICAL DIMENSIONS: In Inches / mm

SHD-1B

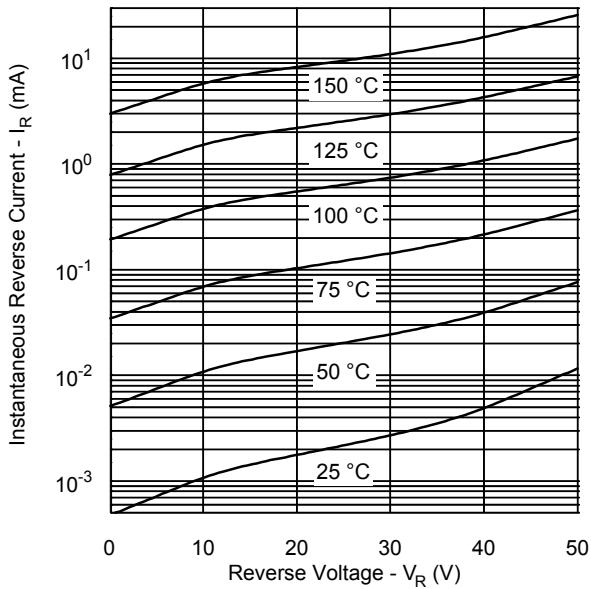
SHD-1



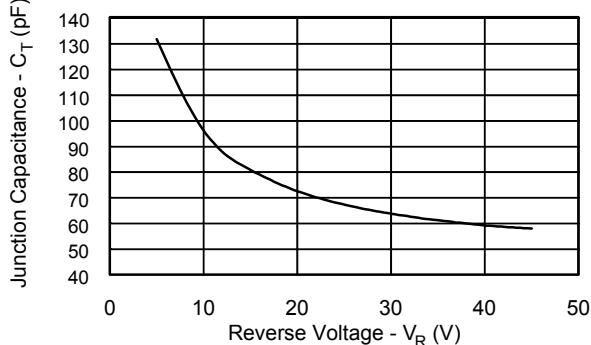
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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