

TECHNICAL DATA
DATA SHEET 5144, REV. C.2

HERMETIC POWER SCHOTTKY RECTIFIER
175°C Maximum Operation Temperature

Add suffix "S" to the part number(s) for **S-100 Screening**.

DESCRIPTION: A 100V, 15A, POWER SCHOTTKY RECTIFIER IN HERMETIC SHD-1/1B HP PACKAGE.

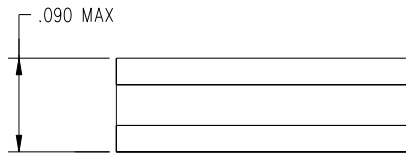
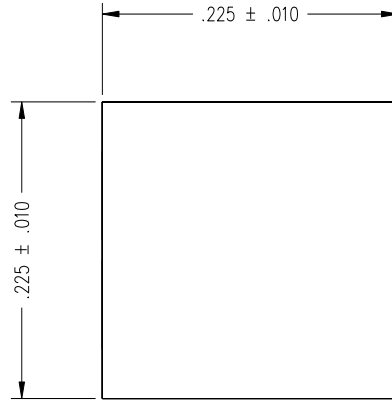
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$)	I_O	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	280	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$)	C_T	600	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	1.7	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	T_{op}/T_{stg}	-65 to + 175	$^\circ\text{C}$

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

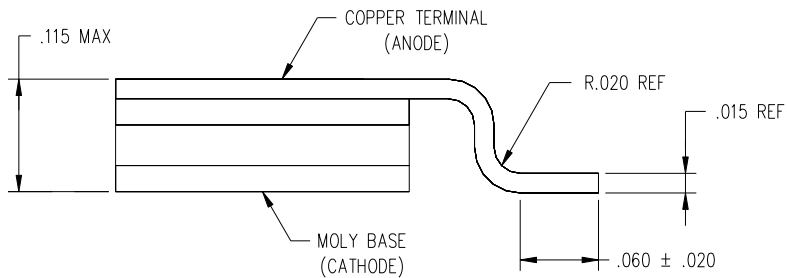
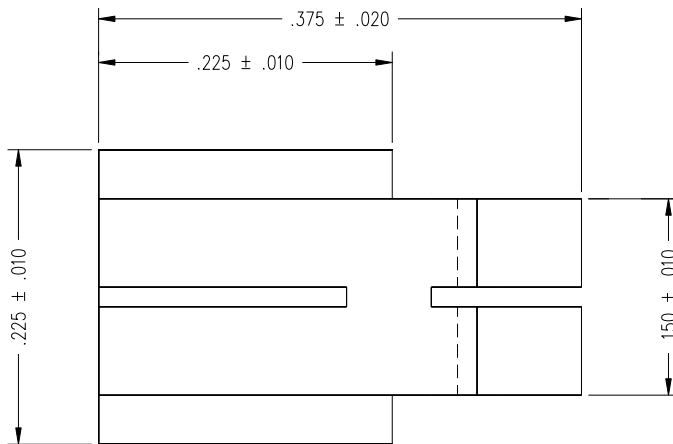
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 15\text{Amps}$) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.84 0.68	Volts
MAXIMUM REVERSE CURRENT (I_r @ 100V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.35 8.0	mA

MECHANICAL DIMENSIONS: In Inches / mm

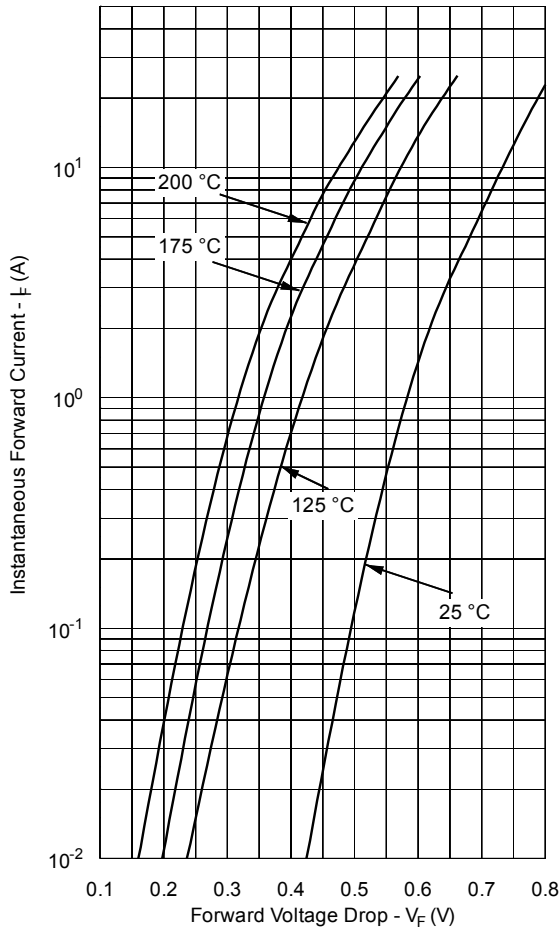
SHD-1 HP



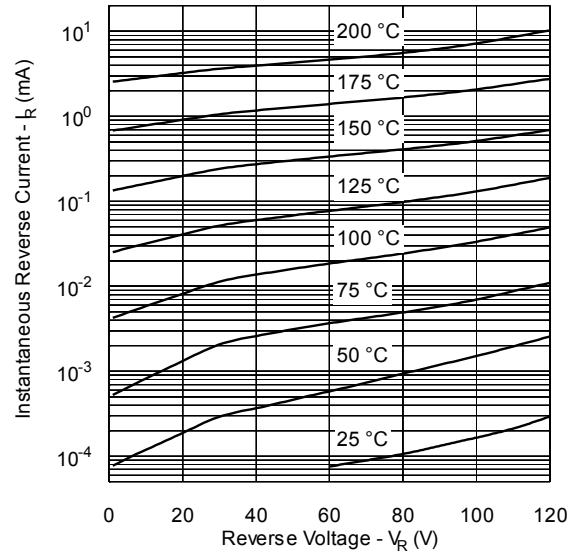
SHD-1B HP



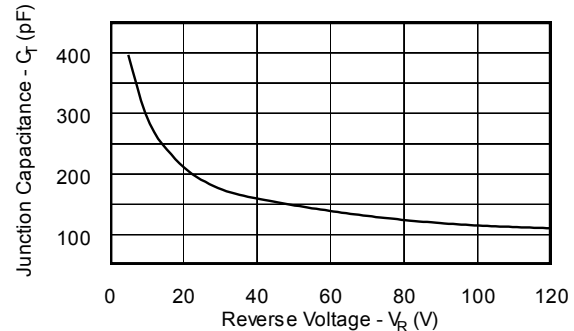
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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