

TECHNICAL DATA
DATASHEET 5579, REV. B

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 °C)	I _O	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I _{FSM}	280	Amps
MAXIMUM JUNCTION CAPACITANCE (V _R =5V)	C _T	600	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	R _{θJC}	1.5	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	°C

ALL RATINGS ARE @ T_C = 25 °C UNLESS OTHERWISE SPECIFIED.

CHARACTERISTIC	SYMBOL	MAX.	UNITS				
MAXIMUM FORWARD VOLTAGE DROP, Pulsed	T _J = 25 °C	I _F = 15 Amps	V _{F1}	0.84	Volts		
		I _F = 20 Amps	V _{F2}	0.90			
		I _F = 30 Amps	V _{F3}	1.00			
	T _J = 125 °C	I _F = 15 Amps	V _{F5}	0.68			
		I _F = 20 Amps	V _{F6}	0.73			
		I _F = 30 Amps	V _{F7}	0.80			
	T _J = -55 °C	I _F = 15 Amps	V _{F9}	0.90			
		I _F = 20 Amps	V _{F10}	0.98			
		I _F = 30 Amps	V _{F11}	1.10			
	MAXIMUM REVERSE CURRENT (I _R @ 100V PIV)	I _r	0.8	3		15	mA
	T _J = 25 °C						
T _J = 100 °C							
T _J = 125 °C							

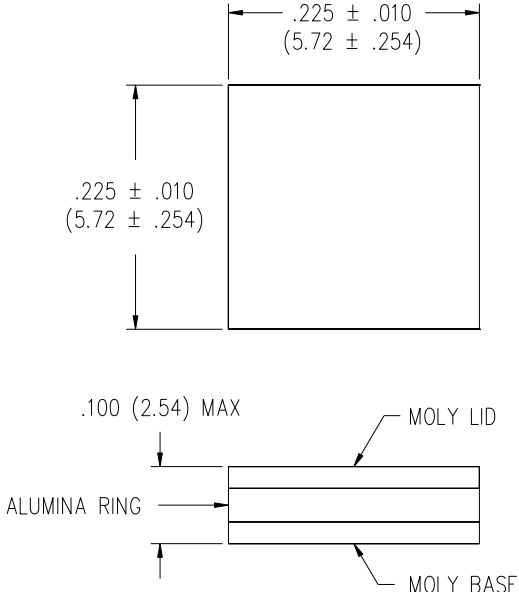
SENSITRON

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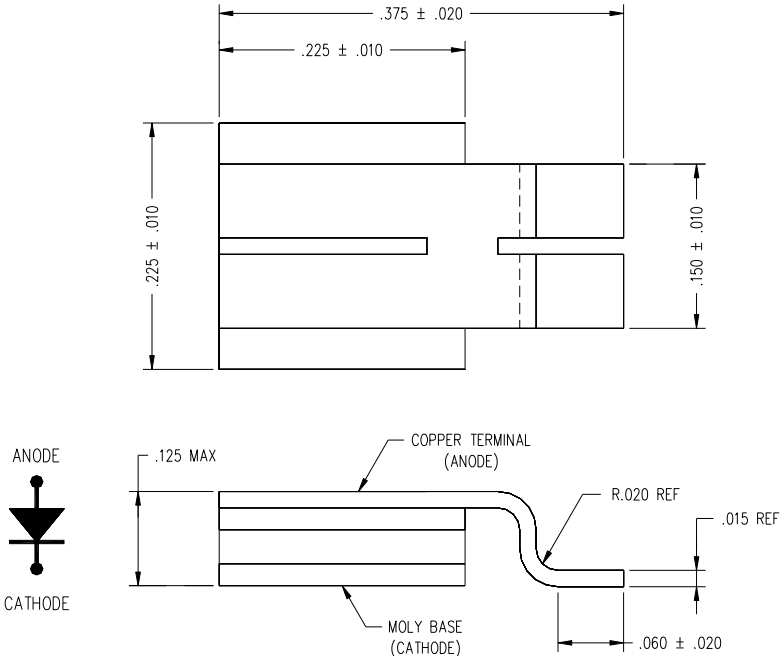
MECHANICAL DIMENSIONS*: In Inches / mm

**Dimensions shown are with solder dipping.

SHD-1 HIGH PROFILE



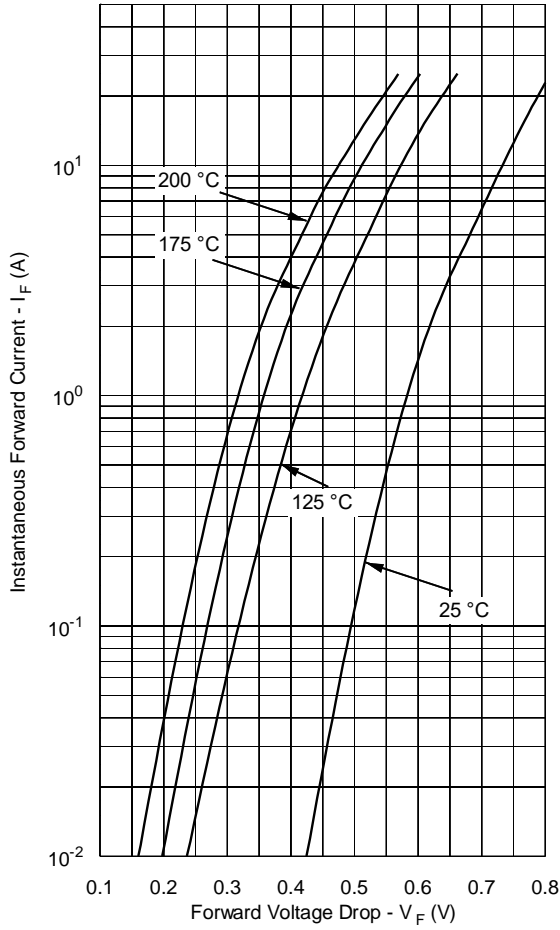
SHD-1B HIGH PROFILE



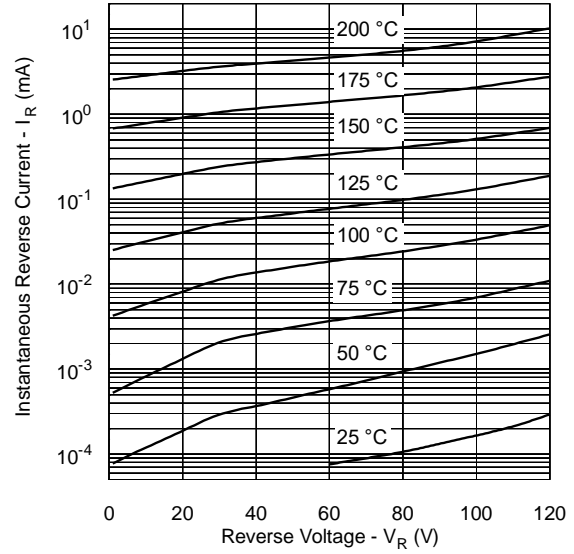
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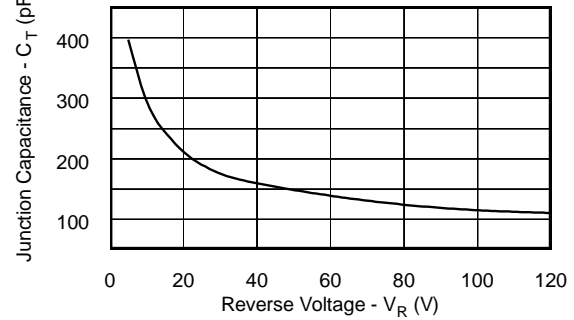
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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PART ORDERING INFORMATION:

SHD176224 XX X

↓
Part Number

Screening Level (blank is no screening):

Suffix	Screened in Accordance with:
blank	No screening level
S	MIL-PRF-19500, TXV Level
SS	MIL-PRF-19500, S Level

QCI (blank is no QCI):

Suffix	Inspection in Accordance with:
blank	No QCI
Q	MIL-PRF-19500 QCI

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