TECHNICAL DATA
DATA SHEET 1049, REV. –

HERMETIC POWER SCHOTTKY RECTIFIER

200°C Maximum Operation Temperature
Very Low Forward Voltage Drop

Applications:

- **Switching Power Supply** • **Converters** • **Free-Wheeling Diodes** • **Polarity Protection Diode**

Features:

- **Soft Reverse Recovery at Low and High Temperature**
- **Very Low Forward Voltage Drop**
- **Low Reverse Leakage Current**
- **Low Power Loss, High Efficiency**
- **High Surge Capacity**
- **Guard Ring for Enhanced Durability and Long Term Reliability**
- **Guaranteed Reverse Avalanche Characteristics**

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T_C=100 °C)	I_O	60	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I_{FSM}	860	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	0.35	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 200	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I_f = 60 Amps) T_J = 25 °C T_J = 125 °C	V_f	 0.95 0.79	Volts
MAXIMUM REVERSE CURRENT (I_r @ 200V PIV) T_J = 25 °C T_J = 125 °C	I_r	 1.1 24	mA
MAXIMUM JUNCTION CAPACITANCE (V_r =5V)	C_T	900	pF

*Due to the nature of the 200V Schottky devices, some degradation in t_{rr} performance at high temperatures should be expected, unlike conventional lower voltage Schottkys.

SENSITRON

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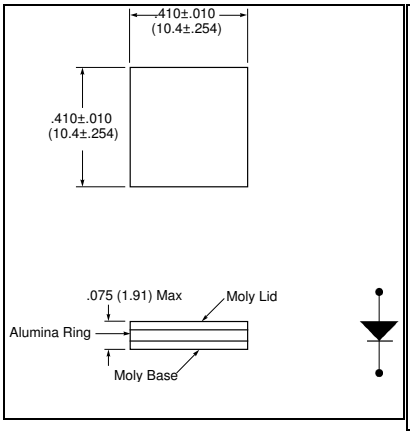
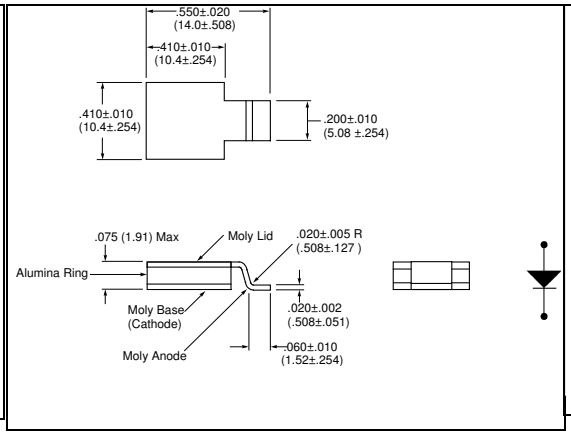
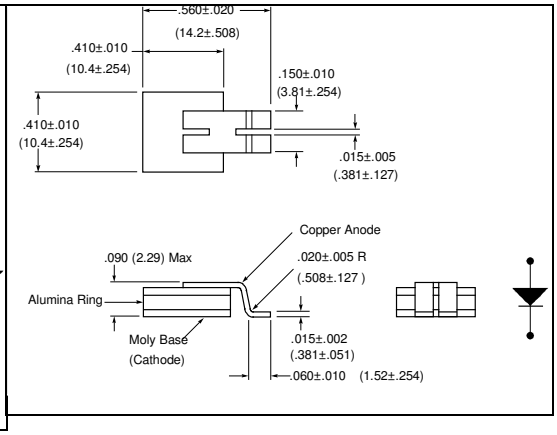
MECHANICAL DIMENSIONS: In Inches / mm



SHD-3

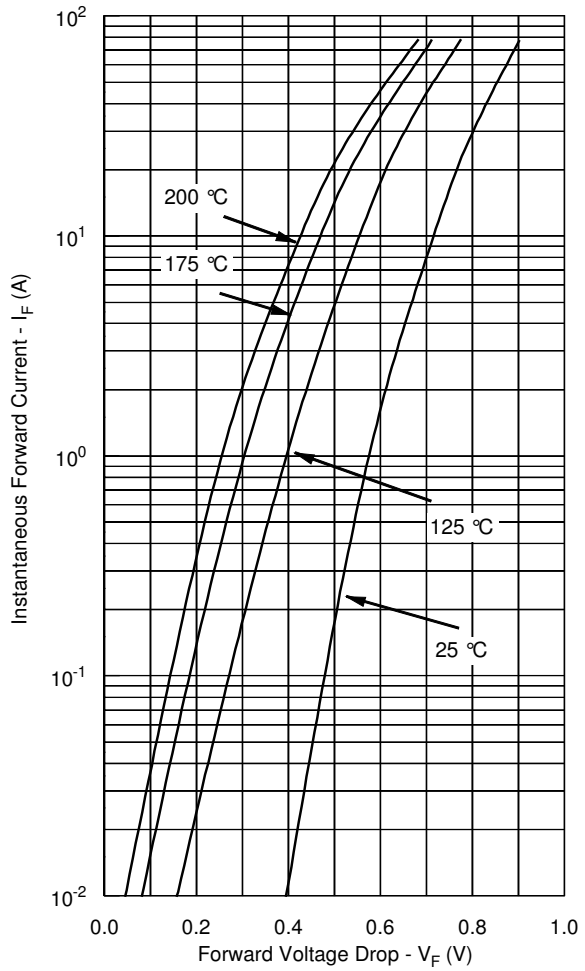


SHD-3A

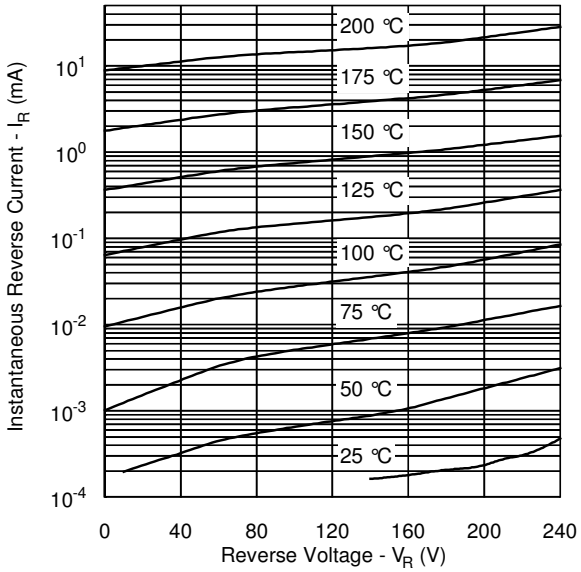


SHD-3B

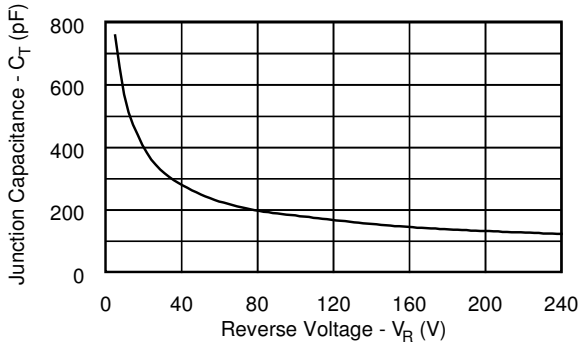
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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