

SILICON SCHOTTKY RECTIFIER
Low Reverse Leakage
175°C Operating Temperature

Applications:

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

Features:

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

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	200	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Single/Doubler)	15	A
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Common Cathode/Common Anode)	15	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine wave	175	A
Max. Junction Temperature	T_J	-	-65 to +175	°C
Max. Storage Temperature	T_{stg}	-	-65 to +175	°C
Thermal Resistance	$R_{\theta JC}$	-	1.7	°C/W

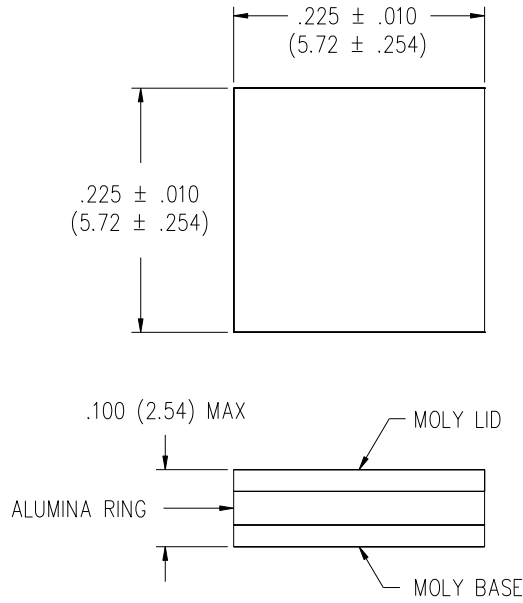
Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 15A, Pulse, $T_J = 25\text{ °C}$	0.92	V
	V_{F2}	@ 15A, Pulse, $T_J = 125\text{ °C}$	0.80	V
Max. Reverse Current	I_{R1}	@ $V_R = 200V$, Pulse, $T_J = 25\text{ °C}$	0.2	mA
	I_{R2}	@ $V_R = 200V$, Pulse, $T_J = 125\text{ °C}$	2.0	mA
Max. Junction Capacitance	C_T	@ $V_R = 5V$, $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$, $V_{SIG} = 50mV$ (p-p)	330	pF

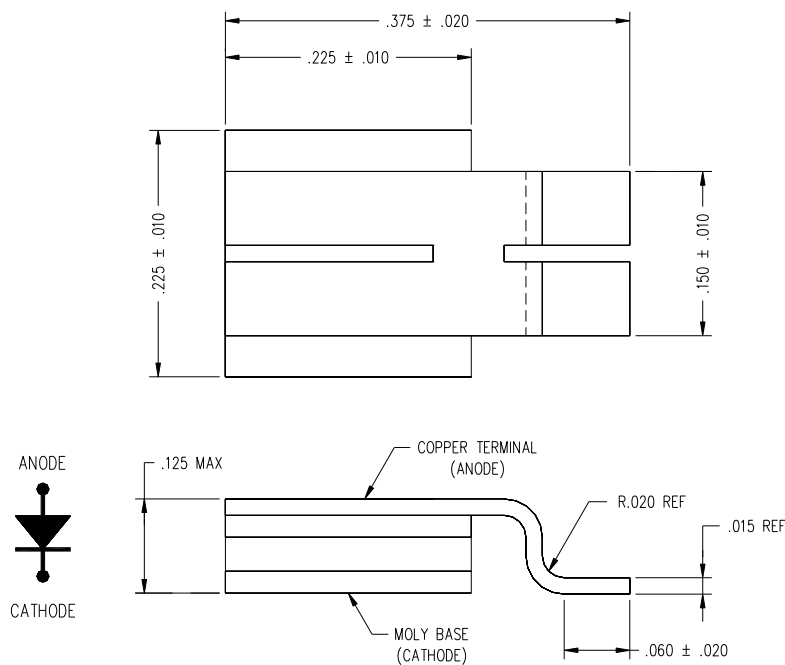
MECHANICAL DIMENSIONS*: In Inches / mm

*Dimensions shown are with solder dipping.

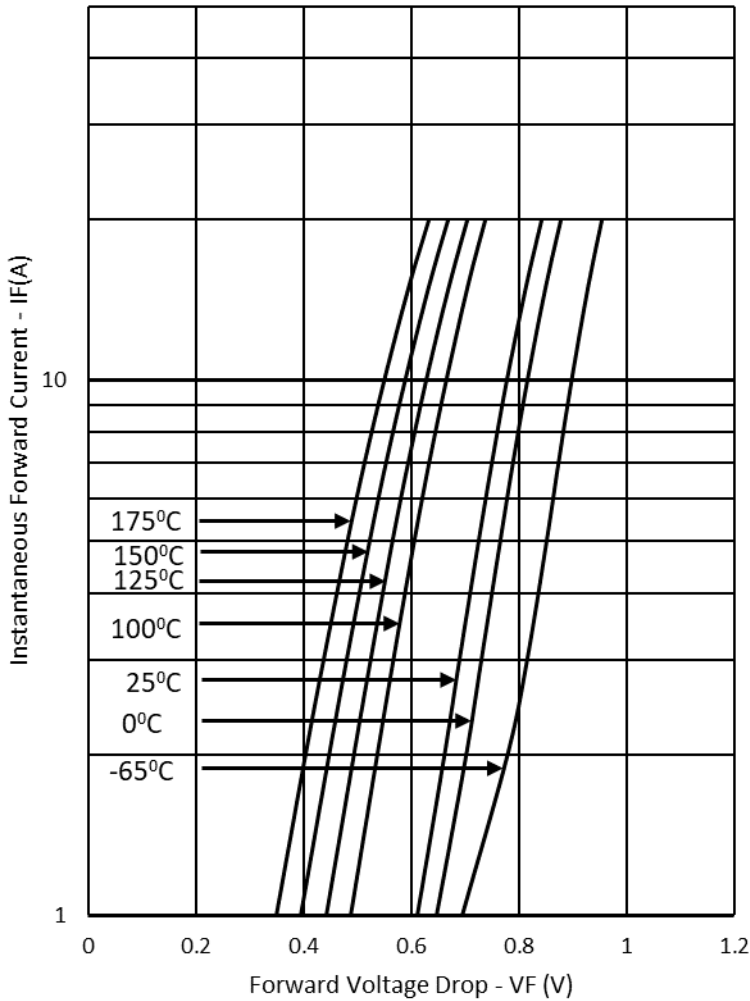
SHD-1 HIGH PROFILE



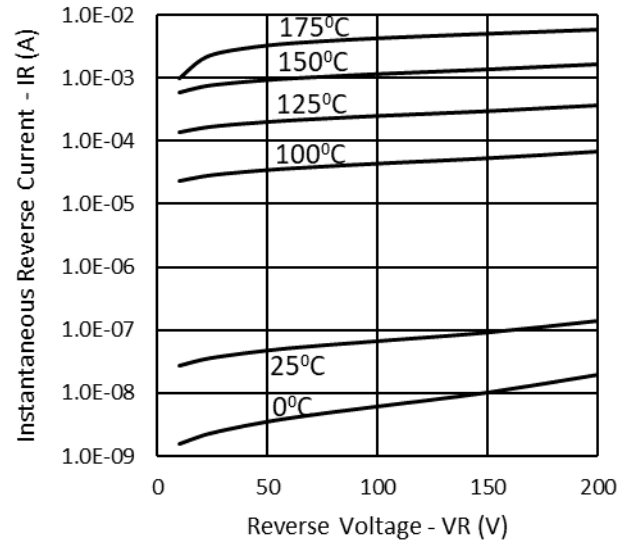
SHD-1B HIGH PROFILE



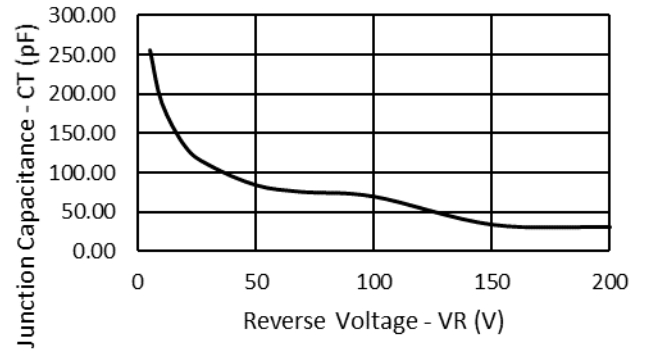
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



SENSITRON
SEMICONDUCTOR

SHD1762H6
SHD1762H6B

TECHNICAL DATA
DATA SHEET 6091, REV. C

PART ORDERING INFORMATION:

SHD1762H6 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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