

TECHNICAL DATA
DATASHEET 5068, REV.A**HERMETIC POWER SCHOTTKY RECTIFIER**
Low Reverse Leakage
Low Forward Voltage Drop**Applications:**

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode •
- 60A 60V Schottky rectifier in SHD-3 package

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

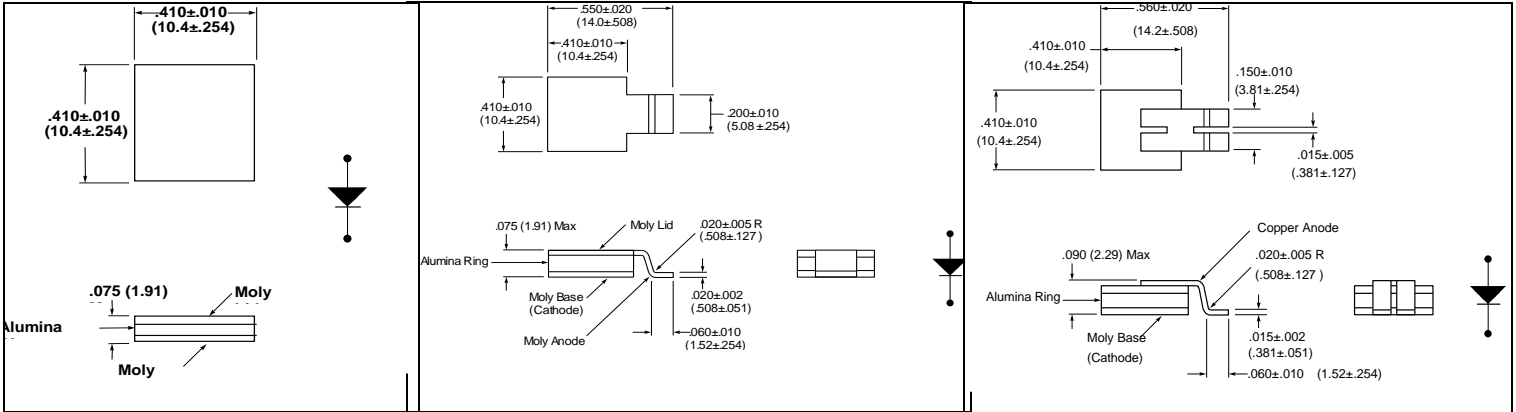
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	60	V
Max. Average Forward Current	$I_{F(AV)}$	-	60	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine wave	600	A
Max. Junction Temperature	T_J	-	-65 to +175	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-65 to +175	$^\circ\text{C}$
Max. Thermal Resistance	$R_{\theta JC}$	-	0.7	$^\circ\text{C/W}$

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 60A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.68	V
	V_{F2}	@ 60A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.61	V
Max. Reverse Current	I_{R1}	@ $V_R = 60\text{V}$, Pulse, $T_J = 25\text{ }^\circ\text{C}$	1.2	mA
	I_{R2}	@ $V_R = 60\text{V}$, Pulse, $T_J = 125\text{ }^\circ\text{C}$	90	mA
Max. Junction Capacitance	C_T	@ $V_R = 5\text{V}$, $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV}$ (p-p)	2600	pF

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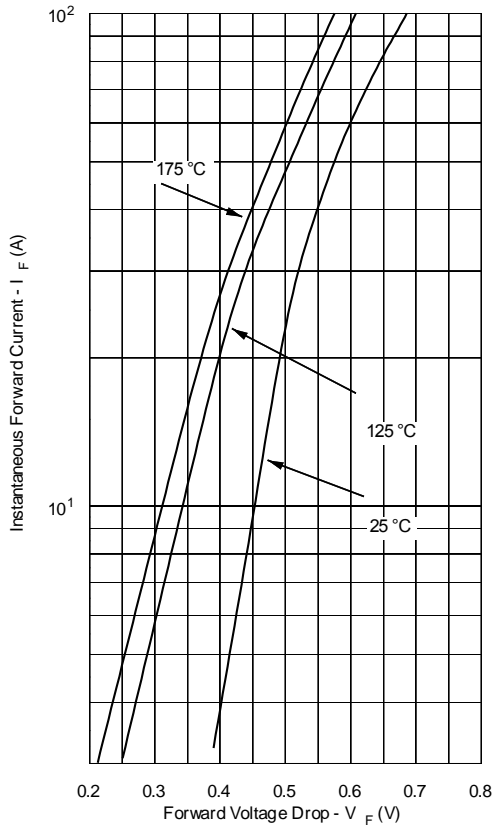
Mechanical Dimensions: in inches / mm



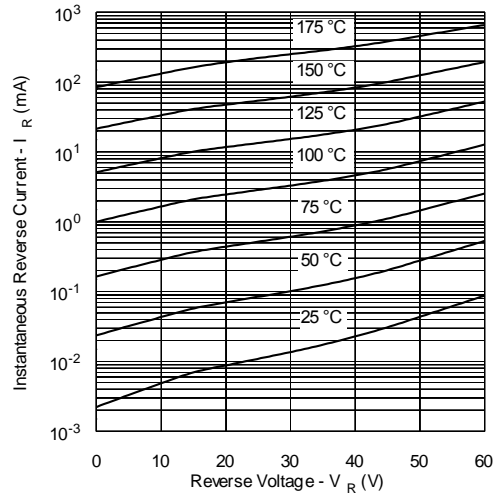
SHD-3

SHD-3B

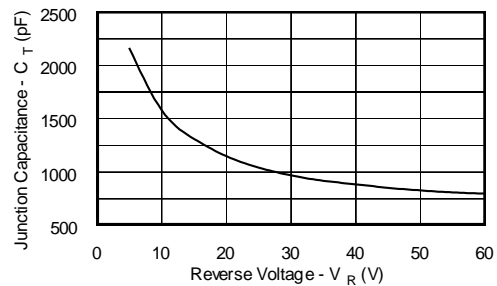
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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