

TECHNICAL DATA
DATA SHEET 5479, REV. A

HERMETIC SCHOTTKY RECTIFIER

Very Low Forward Voltage Drop

Features:

- Soft Reverse Recovery at Low and High Temperature
- Very 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}	-	60	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	30	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine wave	300	A
Non-Repetitive Avalanche Energy	E_{AS}	$T_J = 25\text{ }^\circ\text{C}$, $I_{AS} = 3\text{A}$, $L = 5\text{ mH}$	10	mJ
Repetitive Avalanche Current	I_{AR}	I_{AS} decay linearly to 0 in 1 μs Freq limited by T_J max	2	A
Maximum Thermal Resistance	$R_{\theta JC}$	-	0.9	$^\circ\text{C/W}$
Max. Junction Temperature	T_J	-	-65 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-65 to +150	$^\circ\text{C}$

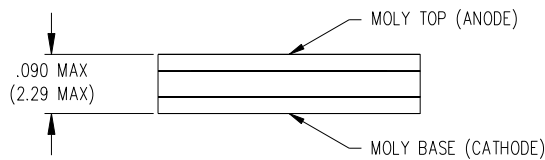
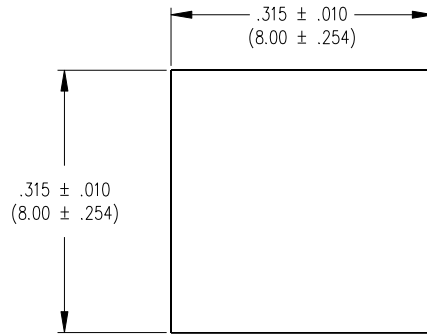
Electrical Characteristics

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 5A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.45	V
	V_{F2}	@ 10A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.50	
	V_{F3}	@ 20A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.56	
	V_{F4}	@ 30A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.63	
	V_{F5}	@ 5A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.38	V
	V_{F6}	@ 10A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.44	
	V_{F7}	@ 20A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.51	
	V_{F8}	@ 30A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.59	
	V_{F9}	@ 5A, Pulse, $T_J = -55\text{ }^\circ\text{C}$	0.57	V
	V_{F10}	@ 10A, Pulse, $T_J = -55\text{ }^\circ\text{C}$	0.61	
	V_{F11}	@ 20A, Pulse, $T_J = -55\text{ }^\circ\text{C}$	0.65	
	V_{F12}	@ 30A, Pulse, $T_J = -55\text{ }^\circ\text{C}$	0.71	
Max. Reverse Current	I_{R1}	@ $V_R = 45\text{V}$, Pulse, $T_J = 25\text{ }^\circ\text{C}$	2	mA
	I_{R2}	@ $V_R = 45\text{V}$, Pulse, $T_J = 125\text{ }^\circ\text{C}$	120	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)	1600	pF

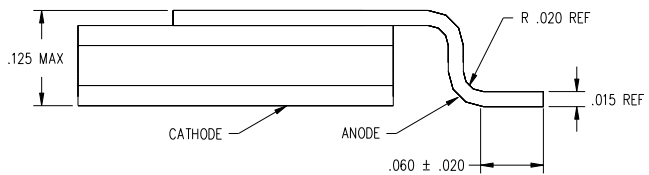
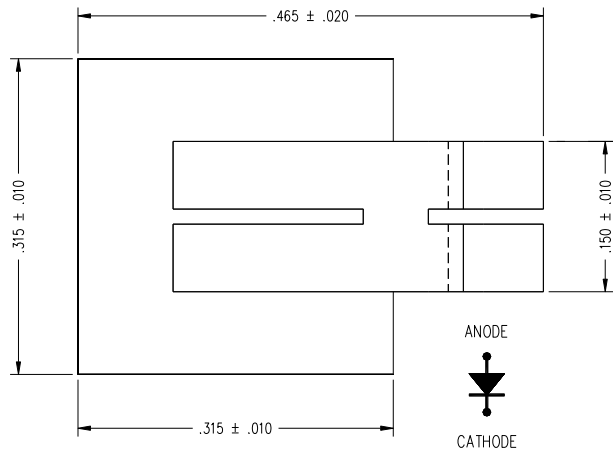
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MECHANICAL DIMENSIONS: In Inches / mm

SHD-2 HIGH PROFILE



SHD-2B HIGH PROFILE

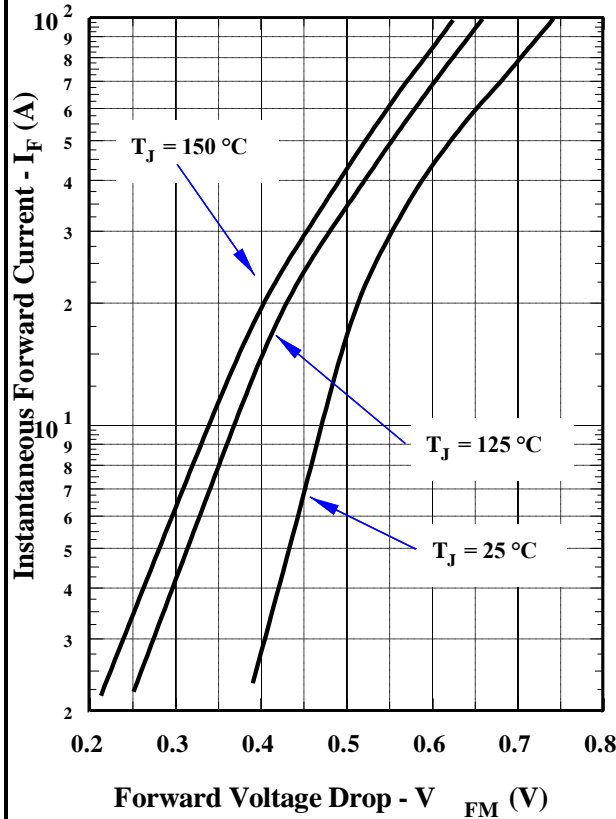


PINOUT TABLE

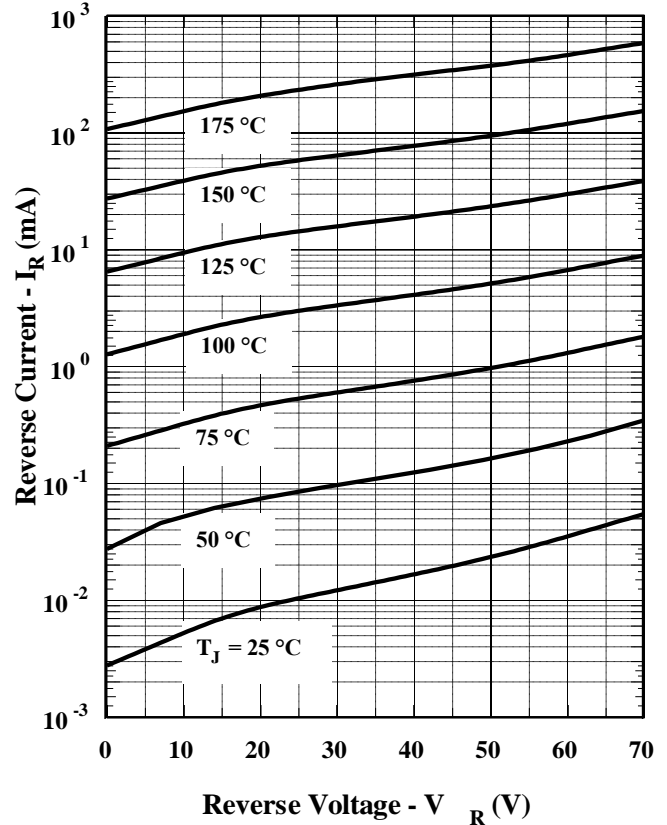
TYPE	PIN 1 (Base)	PIN 2
SINGLE RECTIFIER in a Surface Mount Package	CATHODE	ANODE

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Typical Forward Characteristics



Typical Reverse Characteristics



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