

TECHNICAL DATA
DATA SHEET 5509, REV. -

HERMETIC SCHOTTKY RECTIFIER IN SMD-0.2 Patented Thin Ceramic High Strength Package Very Low Forward Voltage Drop

Features:

- Patented rugged package design (enhanced temperature/power cycling capability over standard SMD-0.2 package)
- Options to ground different nodes to lid (see ordering table)
- 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

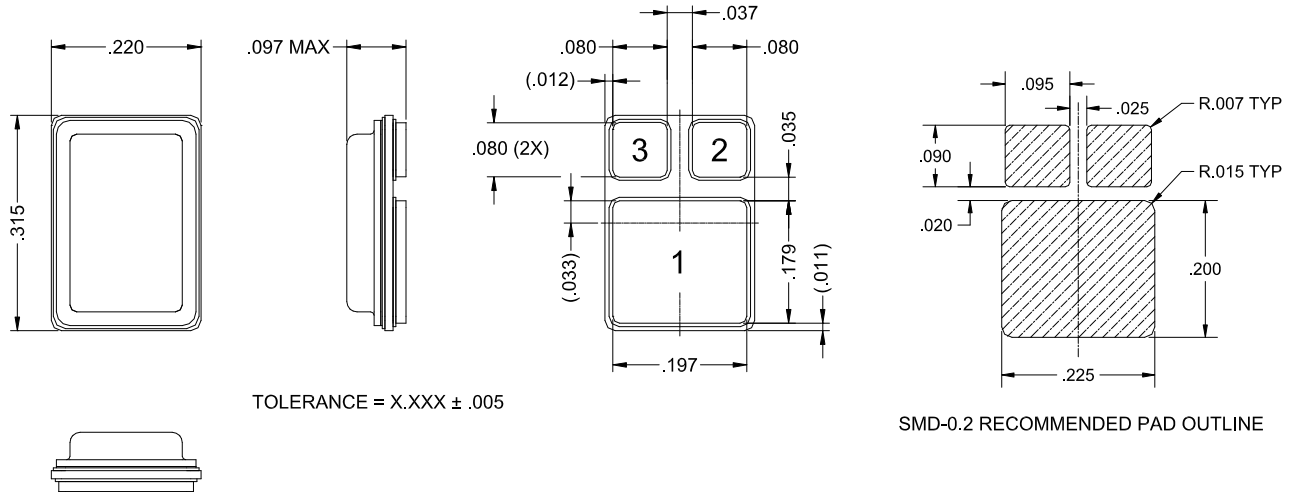
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	60	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Single)	10	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine wave (per leg)	100	A
Maximum Thermal Resistance	$R_{\theta JC}$	-	6.4	°C/W
Max. Junction Temperature	T_J	-	-65 to +150	°C
Max. Storage Temperature	T_{stg}	-	-65 to +150	°C

Electrical Characteristics

Characteristics	Symbol	Condition	Max.	Units	
Max. Forward Voltage Drop (per leg)	V_{F1}	@ 1A, Pulse, $T_J = 25\text{ °C}$	0.43	V	
	V_{F2}	@ 5A, Pulse, $T_J = 25\text{ °C}$	0.54		
	V_{F3}	@ 10A, Pulse, $T_J = 25\text{ °C}$	0.66		
		V_{F4}	@ 1A, Pulse, $T_J = 125\text{ °C}$	0.36	V
		V_{F5}	@ 5A, Pulse, $T_J = 125\text{ °C}$	0.48	
		V_{F6}	@ 15A, Pulse, $T_J = 125\text{ °C}$	0.61	
		V_{F7}	@ 1A, Pulse, $T_J = -55\text{ °C}$	0.53	V
		V_{F8}	@ 5A, Pulse, $T_J = -55\text{ °C}$	0.65	
		V_{F9}	@ 15A, Pulse, $T_J = -55\text{ °C}$	0.78	
Max. Reverse Current (per leg)	I_{R1}	@ $V_R = 60V$, Pulse, $T_J = 25\text{ °C}$	2	mA	
	I_{R2}	@ $V_R = 60V$, Pulse, $T_J = 125\text{ °C}$	140	mA	
Max. Junction Capacitance (per leg)	C_T	@ $V_R = 5V$, $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$, $V_{SIG} = 50mV$ (p-p)	800	pF	

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Mechanical Dimensions: in Inches



SMD-0.2

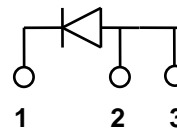
PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE

ORDERING INFORMATION

PART NUMBER	LID CONNECTION
SHDT187213	Floating
SHDT187213J1	PIN 1
SHDT187213J2	PIN 2
SHDT187213J3	PIN 3

SINGLE



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