TECHNICAL DATA DATA SHEET 5510, 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}	-	100	V
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form (Single)	10	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine wave (per leg)	100	Α
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

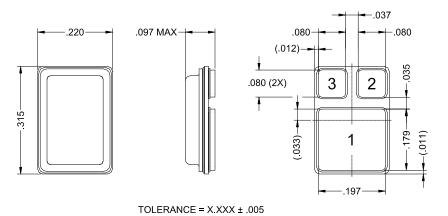
Electrical Characteristics

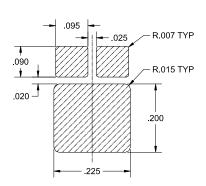
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 1A, Pulse, T _J = 25 °C	0.48	V
(per leg)	V_{F2}	@ 3A, Pulse, T _J = 25 °C	0.56	
	V_{F3}	@ 5A, Pulse, T _J = 25 °C	0.63	
	V_{F4}	@ 7A, Pulse, T _J = 25 °C	0.69	
	V_{F5}	@ 10A, Pulse, T _J = 25 °C	0.76	
	V_{F6}	@ 1A, Pulse, T _J = 125 °C	0.37	V
	V_{F7}	@ 3A, Pulse, T _J = 125 °C	0.47	
	V_{F8}	@ 5A, Pulse, T _J = 125 °C	0.54	
	V_{F9}	@ 7A, Pulse, T _J = 125 °C	0.59	
	V_{F10}	@ 10A, Pulse, T _J = 125 °C	0.66	
	V _{F11}	@ 1A, Pulse, T _J = - 55 °C	0.57	V
	V_{F12}	@ 3A, Pulse, T _J = - 55 °C	0.63	
	V _{F13}	@ 5A, Pulse, T _J = - 55 °C	0.69	
	V_{F14}	@ 7A, Pulse, T _J = - 55 °C	0.74	
	V_{F15}	@ 10A, Pulse, T _J = - 55 °C	0.80	
Max. Reverse Current	I _{R1}	$@V_R = 100V$, Pulse, $T_J = 25 ^{\circ}C$	0.2	mA
(per leg)	I _{R2}	$@V_R = 100V, Pulse, T_J = 125 °C$	20	mΑ
Max. Junction Capacitance	C _T	$@V_R = 5V, T_C = 25 ^{\circ}C$	600	рF
(per leg)		$f_{SIG} = 1MHz, V_{SIG} = 50mV (p-p)$		



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Mechanical Dimensions: in Inches





SMD-0.2 RECOMMENDED PAD OUTLINE



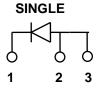
SMD-0.2

PINOUT TABLE

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

ORDERING INFORMATION

PART NUMBER	LID CONNECTION
SHDT187284	Floating
SHDT187284J1	PIN 1
SHDT187284J2	PIN 2
SHDT187284J3	PIN 3



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