



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638

Phone: (562) 404-4474 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

Designer's Data Sheet

FEATURES:

- **Extremely Low Forward Voltage Drop**
- **Low Reverse Leakage**
- **Hermetically Sealed Power Surface Mount Package**
- **Guard Ring for Overvoltage Protection**
- **Eutectic Die Attach**
- **175°C Operating Junction Temperature**
- **TX, TXV, or Space Level Screening Available**

SSR1008

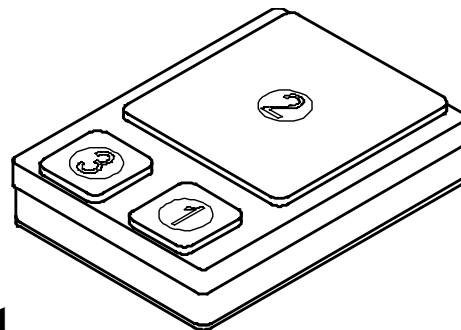
SSR1009

SSR1010

10 AMP

100 VOLTS

SCHOTTKY RECTIFIER



SMD1

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM}	80	Volts
SSR1008			
SSR1009	V_{RWM}	90	
SSR1010	V_R	100	
Average Rectified Output Current ^{1/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	10	Amps
Peak Surge Current ^{1/} (8.3 ms Pulse, Half Sine Wave, superimposed on I_O , allow junction to reach equilibrium between pulses, TA=25°C)	I_{FSM}	200	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance ^{1/} Junction to Case	$R_{\theta JC}$	1.6	°C/W

Notes: 1/ For optimal performance, leads 1 & 3 should be connected.

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RS0197D

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SSR1008
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ A dc}$, $T_A = 25^\circ \text{C}$, Pulse) ($I_F = 5 \text{ A dc}$, $T_A = 25^\circ \text{C}$, Pulse) ($I_F = 10 \text{ A dc}$, $T_A = 25^\circ \text{C}$, Pulse)	V_{F1} V_{F2} V_{F3}	0.55 0.68 0.75	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ A dc}$, $T_A = -55^\circ \text{C}$, Pulse)	V_{F4}	0.83	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ \text{C}$, Pulse)	I_{R1}	100	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ \text{C}$, Pulse)	I_{R2}	5	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ \text{C}$, $f = 1 \text{ MHz}$)	C_J	400	pF

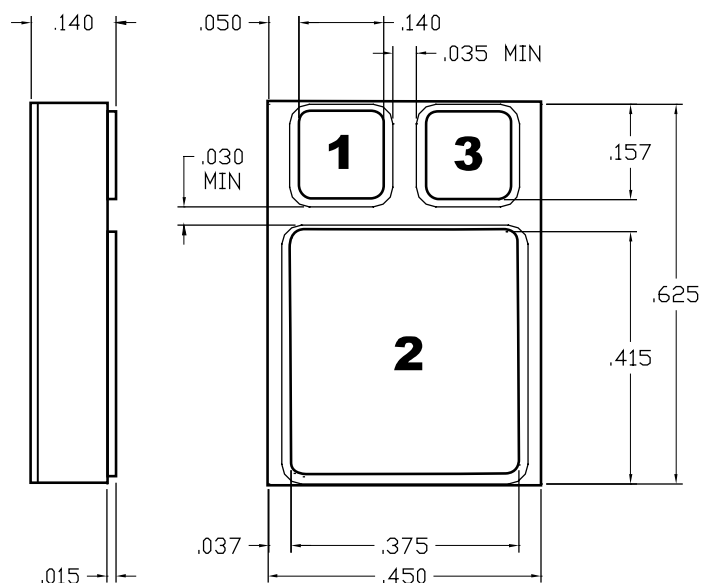
Case Outline- SMD1

PIN OUT: (Rectifier)

PIN 1- ANODE

PIN 2- CATHODE

PIN 3- ANODE



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