



Solid State Devices, Inc.

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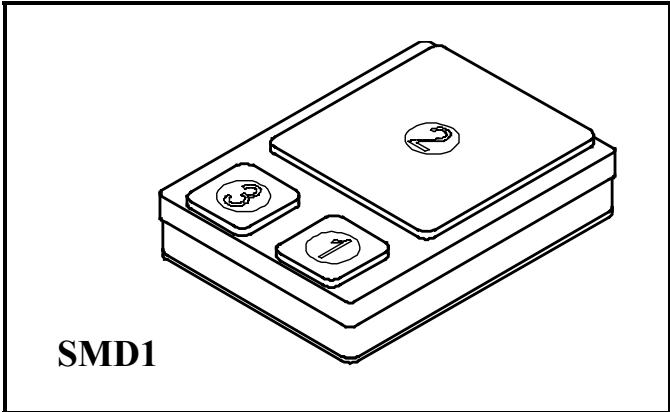
**SSR1008
 SSR1009
 SSR1010**

**10 AMP
 100 VOLTS
 SCHOTTKY RECTIFIER**

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**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM}	80	Volts
SSR1008	V_{RWM}	90	
SSR1009	V_R	100	
SSR1010			
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

DOC



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ELECTRICAL CHARACTERISTICS

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

