



Solid State Devices, Inc.

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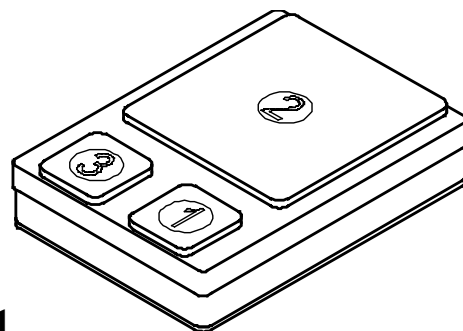
SSR2010

**20 AMP
100 VOLTS
SCHOTTKY RECTIFIER**

Designer's Data Sheet

FEATURES:

- **PIV: 100 Volts**
- **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**



SMD1

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage SSR2010	V_{RRM} V_{RWM} V_R	 100	 Volts
Average Rectified Output Current ^{1/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	20	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}	300	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance ^{1/} Junction to Case	$R_{\theta JC}$	0.8	°C/W

Notes: ^{1/} Both Anode Terminals (1, 3) Tied Together.

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

DATA SHEET #: RS0081D

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ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ A dc}$, $T_A = 25^\circ \text{ C}$, Pulse) ($I_F = 15 \text{ A dc}$, $T_A = 25^\circ \text{ C}$, Pulse) ($I_F = 20 \text{ A dc}$, $T_A = 25^\circ \text{ C}$, Pulse)	V_{F1}	0.68 0.72 0.75	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ A dc}$, $T_A = -55^\circ \text{ C}$, Pulse)	V_{F2}	0.75	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ \text{ C}$, Pulse)	I_{R1}	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ \text{ C}$, Pulse)	I_{R2}	10	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ \text{ C}$, $f = 1 \text{ MHz}$)	C_J	800	pF

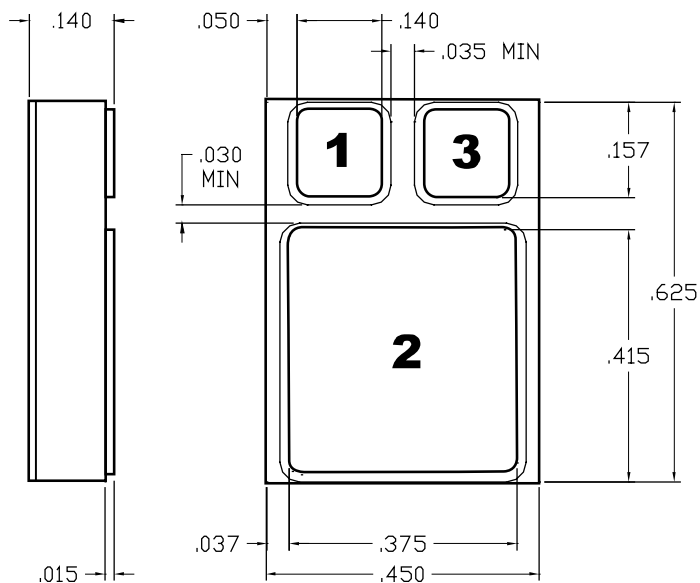
Case Outline- SMD1

PIN OUT:

PIN 1- ANODE

PIN 2- CATHODE

PIN 3- ANODE



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