

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**

## **SSR2010CTS1**

## 20 AMP 100 VOLTS POSITIVE CENTERTAP SCHOTTKY RECTIFIER

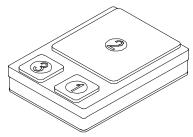
## **FEATURES:**

- 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

MAXIMUM RATINGS			
RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage SSR2010CT	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	100	Volts
Average Rectified Output Current <sup>3/</sup> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	20	Amps
Peak Surge Current <sup>3/</sup> (8.3 ms Pulse, Half Sine Wave superimposed on I <sub>O</sub> , allow junction to reach equilibrium between pulses, TA=25°C)	I <sub>FSM</sub>	300	Amps
Operating and Storage Temperature	T <sub>OP</sub> & T <sub>STG</sub>	-65 to +175	°C
Maximum Thermal Resistance <sup>3/</sup> Junction to Case	R <sub>θJC</sub>	0.8	°C/W

Note: SMD1

- 1/ For ordering information, price, and availability, contact factory.
- 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
- 3/ Both legs tied together.





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ELECTRICAL CHARACTERISTICS (Per Leg)			
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ( $I_F = 3 \text{ Adc}, T_A = 25^{\circ}\text{C}, \text{ Pulse}$ ) ( $I_F = 5 \text{ Adc}, T_A = 25^{\circ}\text{C}, \text{ Pulse}$ ) ( $I_F = 10 \text{ Adc}, T_A = 25^{\circ}\text{C}, \text{ Pulse}$ )	V <sub>F1</sub> V <sub>F2</sub> V <sub>F3</sub>	0.68 0.7 0.77	Vdc
Instantaneous Forward Voltage Drop (I <sub>F</sub> = 5 Adc, T <sub>A</sub> = -55°C, Pulse)	V <sub>F4</sub>	0.84	Vdc
Reverse Leakage Current (Rated V <sub>R</sub> , T <sub>A</sub> = 25°C, Pulse)	I <sub>R1</sub>	100	μΑ
Reverse Leakage Current (Rated V <sub>R</sub> , T <sub>A</sub> = 100°C, Pulse)	I <sub>R2</sub>	5	mA
Junction Capacitance (V <sub>R</sub> = 10 Vdc, T <sub>A</sub> = 25°C, f = 1 MHz)	С¹	400	pF

