



# Solid State Devices, Inc.

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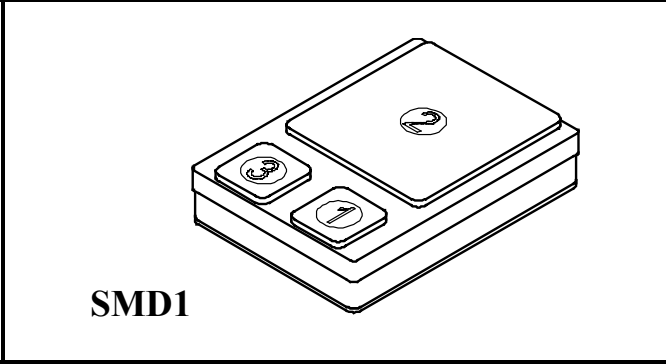
**SSR2010CT**

**20 AMP  
100 VOLTS  
POSITIVE CENTERTAP  
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**



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage  SSR2010CT	$V_{RRM}$  $V_{RWM}$  $V_R$	   <b>100</b>	   <b>Volts</b>
Average Rectified Output Current <sup>1/</sup> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	$I_O$	<b>20</b>	<b>Amps</b>
Peak Surge Current <sup>1/</sup> (8.3 ms Pulse, Half Sine Wave superimposed on $I_O$ , allow junction to reach equilibrium between pulses, TA=25°C)	$I_{FSM}$	<b>300</b>	<b>Amps</b>
Operating and Storage Temperature	$T_{OP}$ & $T_{STG}$	<b>-65 to +175</b>	<b>°C</b>
Maximum Thermal Resistance <sup>1/</sup> Junction to Case	$R_{\theta JC}$	<b>0.8</b>	<b>°C/W</b>

Note: <sup>1/</sup> Both Legs 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 #: RS0067D

DOC



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**ELECTRICAL CHARACTERISTICS (Per Leg)**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3 \text{ Adc}$ , $T_A = 25^\circ \text{C}$ , Pulse) ( $I_F = 5 \text{ Adc}$ , $T_A = 25^\circ \text{C}$ , Pulse) ( $I_F = 10 \text{ Adc}$ , $T_A = 25^\circ \text{C}$ , Pulse)	$V_{F1}$ $V_{F2}$ $V_{F3}$	0.68 0.7 0.77	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5 \text{ Adc}$ , $T_A = -55^\circ \text{C}$ , Pulse)	$V_{F4}$	0.84	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ \text{C}$ , Pulse)	$I_{R1}$	100	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ \text{C}$ , Pulse)	$I_{R2}$	5	mA
<b>Junction Capacitance</b> ( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ \text{C}$ , $f = 1 \text{ MHz}$ )	$C_J$	400	pF

