



# Solid State Devices, Inc.

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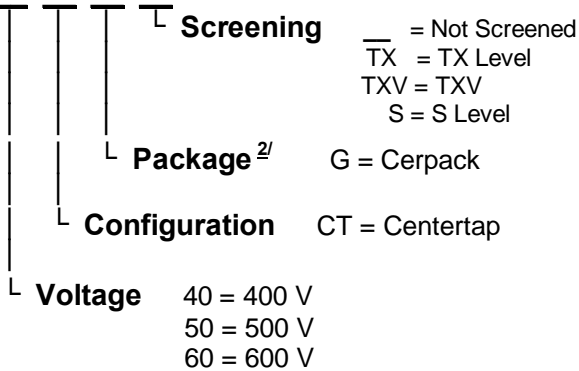
## SSR10C60CT Series

### 10 A / 600 V Schottky Silicon Carbide Centertap Rectifier

### Designer's Data Sheet

#### Part Number / Ordering Information <sup>1/</sup>

SSR10C

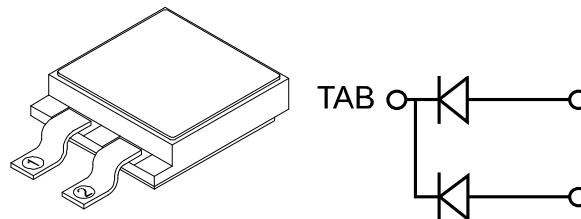


#### FEATURES:

- 600 Volt Silicon Carbide Schottky Rectifier
- Average Output Current 10 Amps
- No Reverse Recovery
- No Forward Recovery
- No Switching Time Change Over Temperature
- Small Package Size
- TX, TXV, and Space Level Screening Available. Consult Factory.

MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive and Peak Reverse Voltage	SSR10C40CT	$V_{RRM}$ $V_R$	400	Volts
	SSR10C50CT		500	
	SSR10C60CT		600	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave)	Per Leg Total	$I_o$	5	Amps
			10	
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ )		$I_{FSM}$	60	Amps
Operating & Storage Temperature		$T_{OP} \& T_{stg}$	-55 to +250	$^\circ\text{C}$
Junction Temperature		$T_J$	-55 to +250	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)		$R_{\theta JC}$	1.5	$^\circ\text{C/W}$

#### CERPACK (G)



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

**DATA SHEET #: SH0036A**

**DOC**



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**SSR10C60CT Series**

ELECTRICAL CHARACTERISTICS <sup>3/</sup>	Symbol	Condition	Temperature (T <sub>A</sub> )						Units
			-55°C		25°C		150°C		
			typ.	max	typ.	max	typ.	max	
<b>Instantaneous Forward Voltage Drop</b> (300 - 500 μsec pulse)	V <sub>F1</sub>	I <sub>F</sub> = 2.0 A	---	---	1.15	1.25	---	---	V <sub>DC</sub>
	V <sub>F2</sub>	I <sub>F</sub> = 5.0 A	---	---	1.25	1.55	---	---	
	V <sub>F3</sub>	I <sub>F</sub> = 10.0A	---	---	1.5	1.9	---	---	
	V <sub>F4</sub>	I <sub>F</sub> = 5.0 A	1.3	1.8	---	---	---	---	
	V <sub>F5</sub>	I <sub>F</sub> = 5.0 A	---	---	---	---	1.25	1.8	
<b>Reverse Leakage Current</b> (300 μsec pulse min)	I <sub>R1</sub>	At rated V <sub>R</sub>	---	---	25	250	---	---	μA
	I <sub>R2</sub>		---	---	50	1000			
<b>Junction Capacitance</b>	C <sub>J</sub>	V <sub>R</sub> = 10V f = 1MHz	---	---	200	350	---	---	pF

**NOTES:**  
 \* Pulse Test: Pulse Width = 300 μsec, Duty Cycle = 2%  
 1/ For Ordering Information, Price, and Availability Contact Factory.  
 2/ For Package Outlines Contact Factory.  
 3/ Unless Otherwise Specified, All Electrical Characteristics @25°C

**Available Part Numbers:**  
**SSR10C40CTG**  
**SSR10C50CTG**  
**SSR10C60CTG**

PIN ASSIGNMENT			
Package	Pin 1	Pin 2	Pin 3 (Tab)
Cerpack (G)	Anode	Anode	Cathode