



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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SSR10C60CT Series

**10 A / 300 - 600 V
 Schottky Silicon Carbide
 Centertap Rectifier**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SSR10C

┌───┐ **Screening** = Not Screened
 ├───┤ TX = TX Level
 ├───┤ TXV = TXV
 └───┘ S = S Level

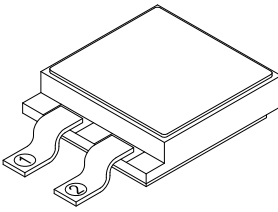
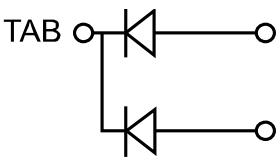
 ┌───┐ **Package** ^{2/} G = Cerpack
 ├───┤
 └───┘ **Configuration** CT = Centertap

 ┌───┐ **Voltage** 30 = 300 V
 ├───┤ 40 = 400 V
 ├───┤ 50 = 500 V
 └───┘ 60 = 600 V

- 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	SSR10C30CT	V_{RRM} V_R	300	Volts
	SSR10C40CT		400	
	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, $T_A = 25^\circ\text{C}$, Per Leg)		I_{FSM}	20	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)



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ELECTRICAL CHARACTERISTICS ^{3/}	Symbol	Condition	Temperature (T _A)						Units
			-55°C		25°C		150°C		
			typ.	max	typ.	max	typ.	max	
Instantaneous Forward Voltage Drop (300 - 500 μsec pulse)	V _{F1}	I _F = 2.0 A	---	---	1.15	1.25	---	---	V _{DC}
	V _{F2}	I _F = 5.0 A	---	---	1.45	1.55	---	---	
	V _{F3}	I _F = 10.0A	---	---	1.95	2.0	---	---	
	V _{F4}	I _F = 5.0 A	1.5	1.8	---	---	---	---	
	V _{F5}	I _F = 5.0 A	---	---	---	---	1.6	1.8	
Reverse Leakage Current (300 μsec pulse min)	I _{R1}	At rated V _R	---	---	10	250	---	---	μA
	I _{R2}		---	---	---	---	20	1000	
Junction Capacitance	C _J	V _R = 10V f = 1MHz	---	---	100	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:
 SSR10C30CTG
 SSR10C40CTG
 SSR10C50CTG
 SSR10C60CTG

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