



PRELIMINARY

Solid State Devices, Inc.

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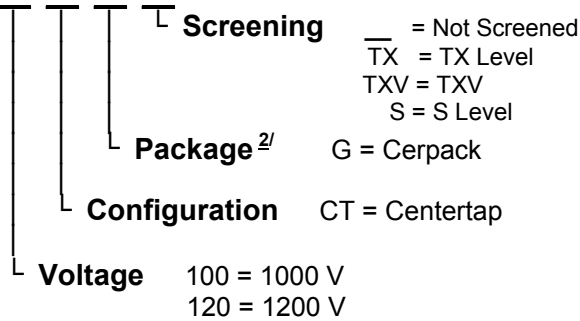
SSR10C120CT Series

10 A / 1200 V Schottky Silicon Carbide Centertap Rectifier

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SSR10C

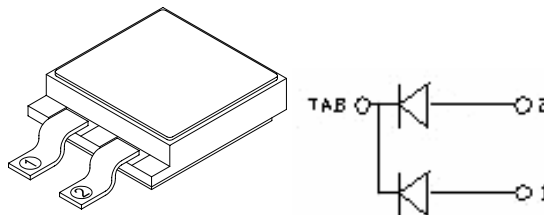


FEATURES:

- 1200 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	SSR10C100CT	V_{RRM}	1000	Volts
	SSR10C120CT	V_R	1200	
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 #: SH0029C

DOC



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SSR10C120CT Series

ELECTRICAL CHARACTERISTICS ^{3/}		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T _A =25°C, 300 - 500 μsec pulse)	I _F = 2.0 A	V _{F1}	—	1.21	1.30	V _{DC}
	I _F = 5.0 A	V _{F2}	—	1.65	1.75	
	I _F = 10 A	V _{F3}	—	2.10	2.50	
Instantaneous Forward Voltage Drop (300 - 500 μsec pulse)	T _A = -55°C, I _F = 5 A	V _{F4}	—	1.46	1.50	V _{DC}
	T _A = 150 °C, I _F = 5 A	V _{F5}	—	2.60	2.80	
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 μsec pulse minimum)		I _{R1}	—	20	250	μA
Reverse Leakage Current (Rated V _R , T _A = 150°C, 300 μsec pulse minimum)		I _{R2}	—	100	1000	μA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	—	280	320	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:
SSR10C100CTG
SSR10C120CTG

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