



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638-5223

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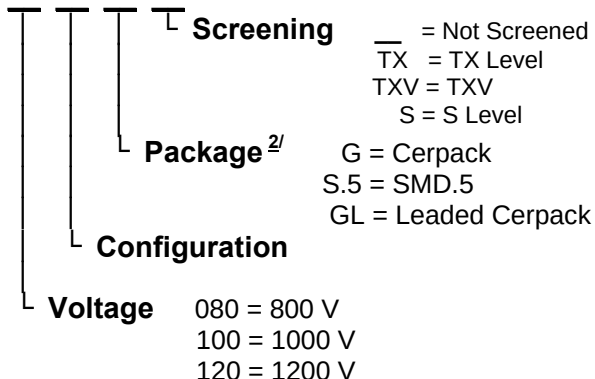
SSR10C120 Series

10 A / 1200 V Schottky Silicon Carbide Rectifier

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SSR10C



FEATURES:

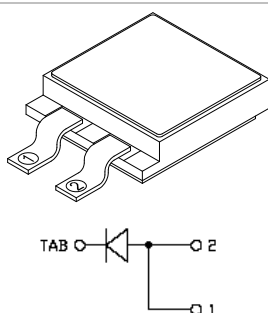
- 1200 Volt Silicon Carbide Schottky Rectifier
- Average Output Current 10 Amps
- No Reverse Recovery
- No Forward Recovery
- No Switching Time Change Over Temperature
- Small Package Size
- TX, TXV, and Space Level Screening Available. Consult Factory.

MAXIMUM RATINGS

		Symbol	Value	Units
Peak Repetitive and Peak Reverse Voltage	SSR05C080	V_{RRM} V_R	800	Volts
	SSR05C100		1000	
	SSR05C120		1200	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave)		I_O	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	50	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)		$R_{\theta JC}$	3.0	$^\circ\text{C/W}$

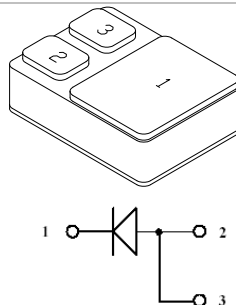
CERPACK (G) ^{2/}

Drawing# 60-0149-366



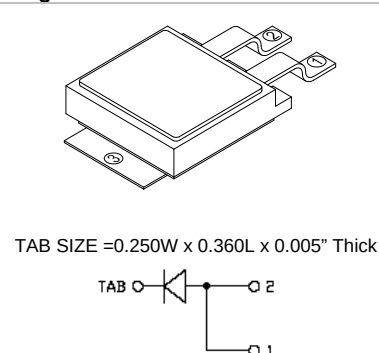
SMD .5 (S.5) ^{2/}

Drawing# 60-0149-507



LEADED CERPACK (GL) ^{2/}

Drawing# 60-0149-366-1



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

DATA SHEET #: SH0067A

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SSR10C120 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}	—	1.05	1.30	V _{DC}
	I _F = 5.0 A	V _{F2}	—	1.25	1.75	
	I _F = 10.0 A	V _{F3}	—	1.50	2.00	
Instantaneous Forward Voltage Drop (300 - 500 µsec pulse)	T _A = -55°C, I _F = 10 A	V _{F4}	—	1.40	2.00	V _{DC}
	T _A = 150 °C, I _F =10A	V _{F5}	—	2.00	2.80	
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 µsec pulse minimum)		I _{R1}	—	10	100	µA
Reverse Leakage Current (Rated V _R , T _A = 150°C, 300 µsec pulse minimum)		I _{R2}	—	15	500	µA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	—	375	450	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:

SSR10C080G, SSR10C080GL, SSR10C080S.5

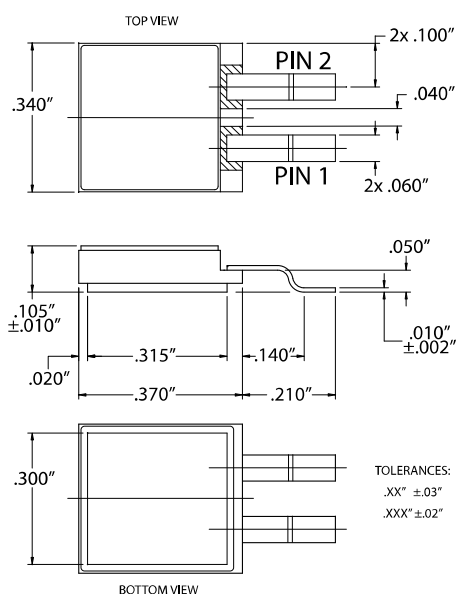
SSR10C100G, SSR10C100GL, SSR10C100S.5

SSR10C120G, SSR10C120GL, SSR10C120S.5

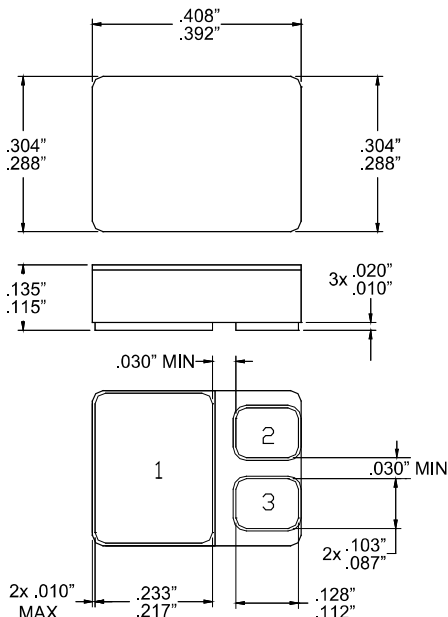
PIN ASSIGNMENT

Package	Pin 1	Pin 2	Pin 3
Cerpack (G)	Anode	Anode	Cathode
SMD.5 (S.5)	Cathode	Anode	Anode
Cerpack Leaded (GL)	Anode	Anode	Cathode

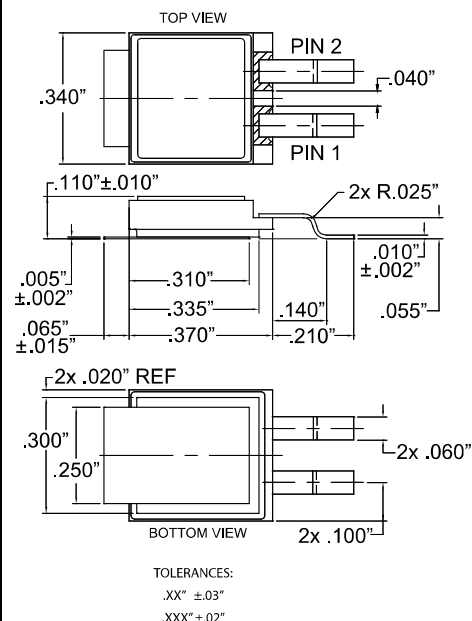
Package Outline: CERPACK



Package Outline: SMD.5



Package Outline: LEADED CERPACK



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