Solid State Devices, Inc.
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SSR2008G
SSR2009G
SSR2010G
SSR2015G

Designer's Data Sheet

Part Number / Ordering Information 1/

SSR20 15 G ___

Screening2/
___ = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

Package
G = Cerpack

Voltage
08 = 80 V
09 = 90 V
10 = 100 V
15 = 150 V

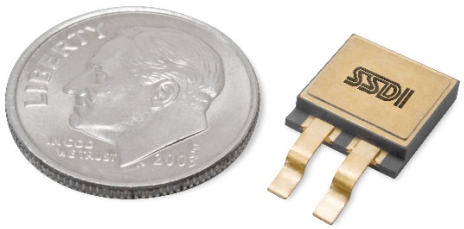
20 AMP
80 - 150 VOLTS
LOW LEAKAGE
SCHOTTKY RECTIFIER

FEATURES:
- Extremely Low Forward Voltage Drop
- Extremely Low Reverse Leakage
- Hermetically Sealed Custom Surface Mount Package
- Guard Ring for Overvoltage Protection
- 175°C Operating Junction Temperature
- TX, TXV, and Space Level Screening Available

MAXIMUM RATINGS3/		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SSR2008G** **SSR2009G** **SSR2010G** **SSR2015G**	V_{RRM} V_{RWM} V_R	80 90 100 150	**Volts**
Average Rectified Forward Current4/ (Resistive Load, 60 Hz, Sine Wave, T_A = 25°C)		I_O	20	**Amps**
Peak Surge Current4/ (8.3 ms Pulse, Half Since Wave Superimposed on I_O, Allow Junction to Reach Equilibrium Between Pulses, T_A = 25°C)		I_{FSM}	175	**Amps**
Operating & Storage Temperature		T_{OP} & T_{stg}	-65 to +175	**°C**
Maximum Thermal Resistance4/ (Junction to Case)		$R_{\theta JC}$	1.25	**°C/W**

NOTES:
1/ For ordering information, price, operating curves, and availability – contact factory.
2/ Screening based on MIL-PRF-19500. Screening flows available on request.
3/ All electrical characteristics @25°C unless otherwise specified.
4/ For optimal performance, leads 1 & 2 should be connected together.

Cerpack (G)



**Dime used for size reference*

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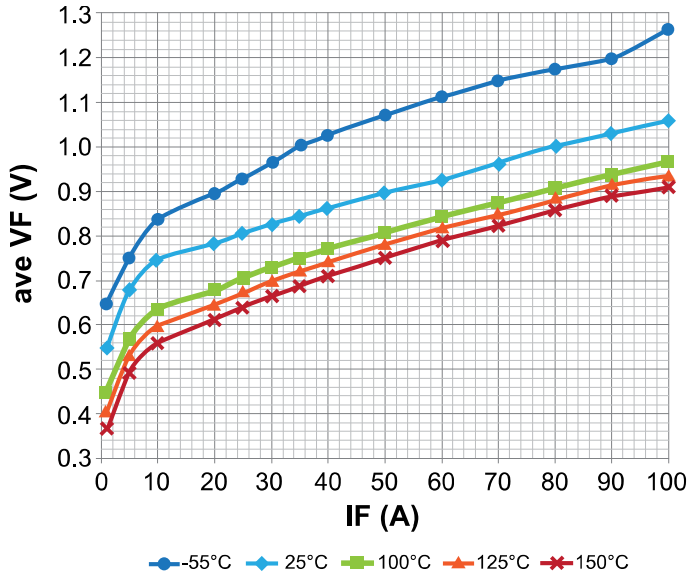
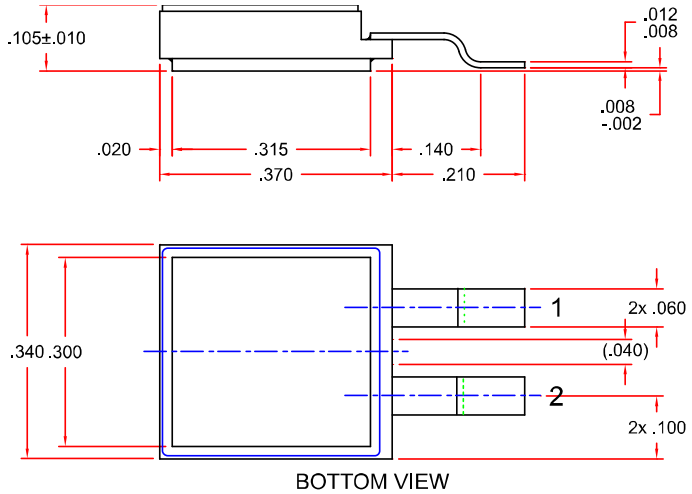
ELECTRICAL CHARACTERISTICS		Symbol	Typ	Max	Units
Instantaneous Forward Voltage Drop (I_F = 1 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F1} V_{F2} V_{F3}	0.65 0.55 0.41	- 0.60 0.46	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 5 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F4} V_{F5} V_{F6}	0.76 0.68 0.53	- 0.75 0.60	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 10 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F7} V_{F8} V_{F9}	0.85 0.75 0.60	- 0.82 0.67	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 20 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F10} V_{F11} V_{F12}	0.91 0.79 0.65	- 0.87 0.73	V_{DC}
Reverse Leakage Current (T_A = 25°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R1}	0.2 5.0	5 50	µA
Reverse Leakage Current (T_A = 125°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R2}	150 500	750 2500	µA
Reverse Leakage Current (T_A = 150°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R3}	0.75 2.50	—	mA
Junction Capacitance (V_R = 10V, f = 1MHz, T_A = 25˚C)	V_R = 5 V V_R = 10 V	C_J	460 335	— 400	pF

Note: For optimal performance, connect Anode terminals together.



CASE OUTLINE: CERPACK (Suffix G)



PIN OUT: PIN 1: ANODE
PIN 2: ANODE
BOTTOM PAD: CATHODE

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	**DATA SHEET #: RS0203G**	**DOC**