


**Solid State Devices, Inc.**

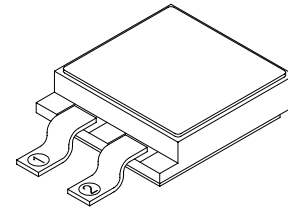
14701 Firestone Blvd \* La Mirada, Ca 90638  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
 ssdi@ssdi-power.com \* www.ssdi-power.com

**Designer's Data Sheet**
**FEATURES:**

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

**SSR1008G**  
**SSR1009G**  
**SSR1010G**

**10AMPS**  
**60 - 100 VOLTS**  
**SCHOTTKY**  
**RECTIFIER**

**CERPACK (G)**


| <b>MAXIMUM RATINGS</b>  |                                  | <b>Symbol</b>                   | <b>Value</b>    | <b>Units</b> |
|---|----------------------------------|---------------------------------|-----------------|--------------|
| <b>Peak Repetitive Reverse and DC Blocking Voltage</b>  | SSR1008G<br>SSR1009G<br>SSR1010G | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 80<br>90<br>100 | <b>Volts</b> |
| <b>Average Rectified Forward Current <sup>1/</sup></b><br>(Resistive Load, 60 Hz, Sine Wave, $T_A = 25^\circ\text{C}$ )   |                                  | $I_O$                           | 10              | <b>Amps</b>  |
| <b>Peak Surge Current <sup>1/</sup></b><br>(8.3 ms Pulse, Half Sine Wave Superimposed on $I_O$ , Allow Junction to Reach Equilibrium Between Pulses, $T_A = 25^\circ\text{C}$ ) |                                  | $I_{FSM}$                       | 200             | <b>Amps</b>  |
| <b>Operating &amp; Storage Temperature</b>  |                                  | $T_{OP}$ & $T_{stg}$            | -65 to +175     | <b>°C</b>    |
| <b>Maximum Thermal Resistance <sup>1/</sup></b><br>(Junction to Case)   |                                  | $R_{\theta JC}$                 | 1.2             | <b>°C/W</b>  |

**Notes:**

**<sup>1/</sup>** For optimal performance, leads 1 & 2 should be connected together.



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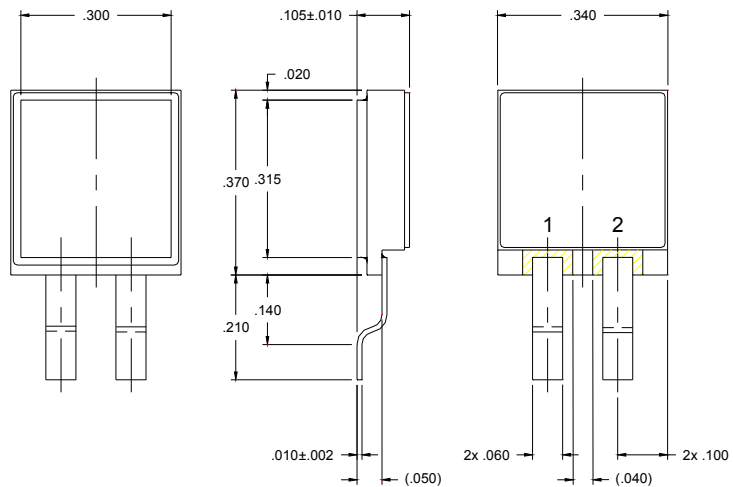
| ELECTRICAL CHARACTERISTICS  |                           | Symbol   | Min | Typ | Max  | Units         |
|---|---------------------------|----------|-----|-----|------|---------------|
| <b>Instantaneous Forward Voltage Drop</b><br>( $T_A = 25^\circ\text{C}$ , 300 $\mu\text{sec}$ pulse)            | $I_F = 1\text{ A}$        | $V_{F1}$ | —   | —   | 0.56 | $V_{DC}$      |
|   | $I_F = 5\text{ A}$        |          | —   | —   | 0.72 |               |
|   | $I_F = 10\text{ A}$       |          | —   | —   | 0.82 |               |
| <b>Instantaneous Forward Voltage Drop</b><br>( $I_F = 5\text{ A}$ , 300 $\mu\text{sec}$ pulse)                  | $T_A = -55^\circ\text{C}$ | $V_{F2}$ | —   | —   | 0.79 | $V_{DC}$      |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{sec}$ pulse minimum)  |                           | $I_{R1}$ | —   | —   | 100  | $\mu\text{A}$ |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{sec}$ pulse minimum) |                           | $I_{R2}$ | —   | —   | 5    | <b>mA</b>     |
| <b>Junction Capacitance</b><br>( $V_R = 10\text{V}$ , $f = 1\text{MHz}$ , $T_A = 25^\circ\text{C}$ )            |                           | $C_J$    | —   | —   | 400  | <b>pF</b>     |

**CASE OUTLINE:**  
**CERPACK (Suffix G)**

**PIN OUT:**

- PIN 1: ANODE**
- PIN 2: ANODE**
- TAB: CATHODE**

**Note: For optimal performance, connect Anode terminals together.**



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

**DATA SHEET #: RS0203E**

**DOC**