



**Solid State Devices, Inc.**

14830 Valley View Blvd \* La Mirada, Ca 90638

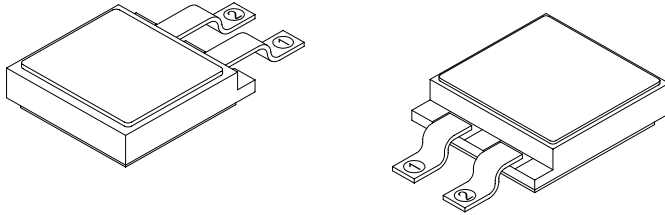
Phone: (562) 404-7855 \* Fax: (562) 404-1773

ssdi@ssdi-power.com \* www.ssdi-power.com

# SSR3045CTG

## DESIGNER'S DATA SHEET

### CerPack



**SSR3045CT**

Screening <sup>2/</sup> \_\_\_ = Commercial  
TX = TX Level  
TXV = TXV Level  
S = S Level  
  
Package: G = CerPack

**15 AMP per leg / 45 Volts  
LOW VOLTAGE DROP  
SCHOTTKY POWER DIODE  
COMMON CATHODE CENTERTAP**

### Features:

- Extremely Low Forward Voltage Drop
- Low reverse leakage
- Excellent high temperature performance
- Hermetically Sealed, low thermal resistance power Package
- Eutectic die attach and monometallic contacts for improved reliability
- TX, TXV, S-Level screening available

| Maximum Ratings                                         |                                                                                                                                     | Symbol               | Value       | Units              |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage and DC Blocking Voltage |                                                                                                                                     | $V_{RWM}$<br>$V_R$   | 45          | V                  |
| Average Rectified Forward Current                       | PER LEG                                                                                                                             | $I_O$                | 15          | A                  |
| Peak Surge Current                                      | 8.3 ms pulse, half sinewave superimposed on $I_O$ ; allow junction to reach equilibrium in between pulses; $T_a = 25^\circ\text{C}$ | $I_{FSM}$            | 250         | A                  |
| Peak Reverse Energy                                     | $L = 260 \mu\text{H}$                                                                                                               | $E_R$                | 0.5         | mJ                 |
| Operating & Storage Temperature                         |                                                                                                                                     | $T_{OP}$ & $T_{STG}$ | -55 to +150 | $^\circ\text{C}$   |
| Maximum Thermal Resistance                              | (Junction to Case)                                                                                                                  | $R_{\theta JC}$      | 2.25        | $^\circ\text{C/W}$ |

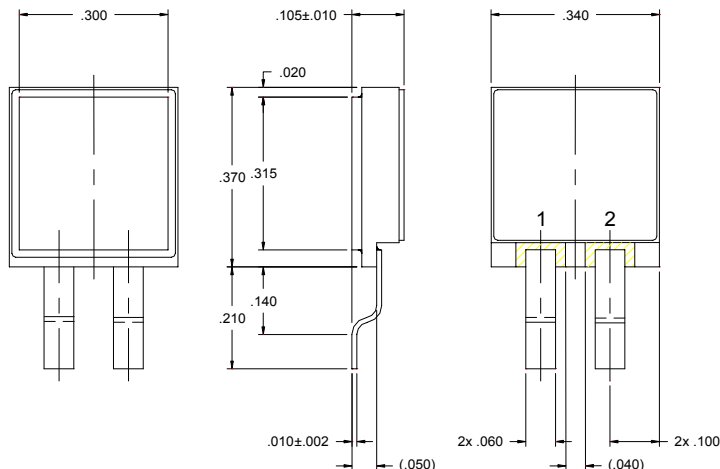
### PACKAGE OUTLINE: CERPACK

#### PINOUT:

**PIN 1: ANODE 1**

**PIN 2: ANODE 2**

**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 #: SH0035A**

**DOC**



**Solid State Devices, Inc.**

14830 Valley View Blvd \* La Mirada, Ca 90638

Phone: (562) 404-7855 \* Fax: (562) 404-1773

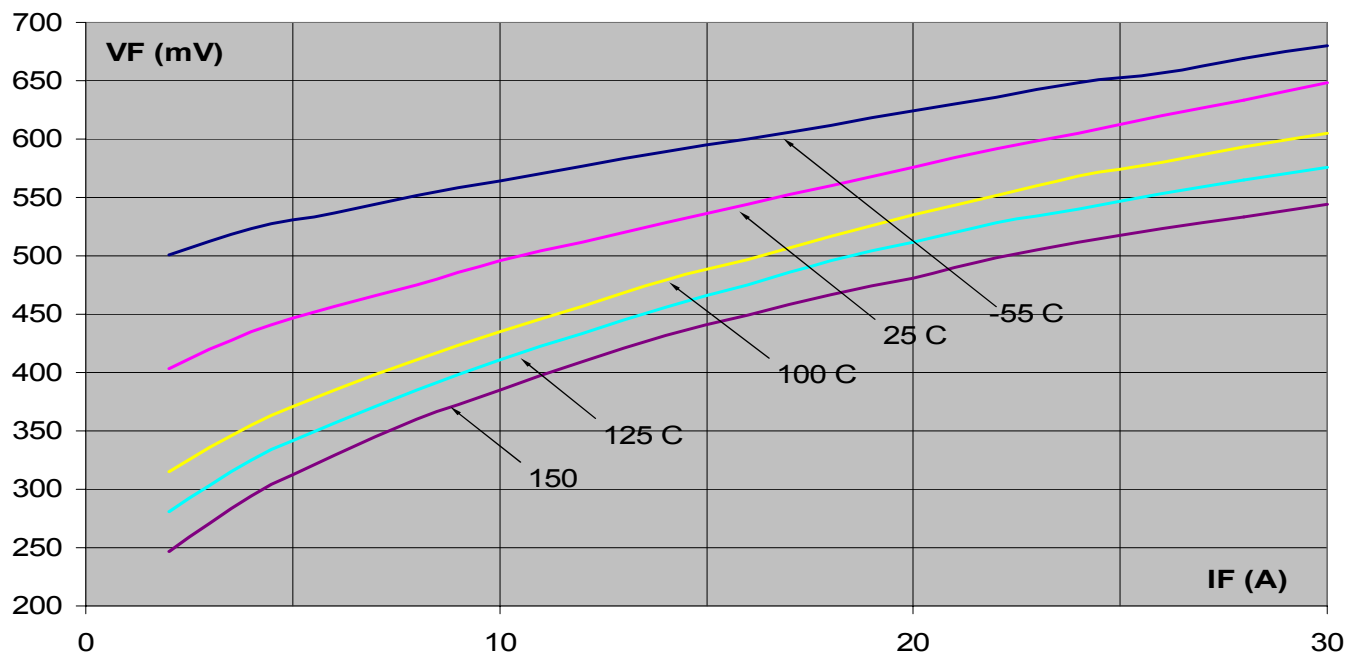
ssdi@ssdi-power.com \* www.ssdi-power.com

# SSR3045CTG

| Electrical Characteristics <sup>1/</sup> , per leg               |                                      | Symbol   | Min | Typ  | Max | Units         |
|------------------------------------------------------------------|--------------------------------------|----------|-----|------|-----|---------------|
| Instantaneous Forward Voltage Drop                               | $I_F = 1\text{ A}$                   | $V_{F1}$ |     | 430  | —   | mV            |
|                                                                  | $I_F = 5\text{ A}$                   | $V_{F2}$ | —   | 520  | 600 |               |
|                                                                  | $I_F = 10\text{ A}$                  | $V_{F3}$ |     | 600  | —   |               |
|                                                                  | $I_F = 15\text{ A}$                  | $V_{F4}$ |     | 700  | 800 |               |
| Instantaneous Forward Voltage Drop,<br>$T_c = 125^\circ\text{C}$ | $I_F = 5\text{ A}$                   | $V_{F5}$ | —   | 400  | 500 | mV            |
|                                                                  | $I_F = 15\text{ A}$                  | $V_{F6}$ |     | 600  | 700 |               |
| Instantaneous Forward Voltage Drop,<br>$T_c = -55^\circ\text{C}$ | $I_F = 5\text{ A}$                   | $V_{F7}$ | —   | 580  | —   | mV            |
|                                                                  | $I_F = 15\text{ A}$                  | $V_{F8}$ |     | 750  | —   |               |
| Reverse Leakage Current                                          | $V_R = 45\text{V}$                   | $I_{R1}$ | —   | 10   | 50  | $\mu\text{A}$ |
| Reverse Leakage Current, $T_c = 100^\circ\text{C}$               | $V_R = 45\text{V}$                   | $I_{R2}$ | —   | 1500 | —   | $\mu\text{A}$ |
| Reverse Leakage Current, $T_c = 125^\circ\text{C}$               | $V_R = 45\text{V}$                   | $I_{R3}$ | —   | 6.5  | 15  | mA            |
| Junction Capacitance                                             | $V_R = 10\text{V}, f = 1\text{ MHz}$ | $C_{j1}$ | —   | 500  | 600 | pF            |

**NOTES:** \* Pulse Test: Pulse Width = 300 $\mu\text{sec}$ , Duty Cycle = 2%.

<sup>1/</sup>Unless Otherwise Specified, All Electrical Characteristics @25°C



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

**DATA SHEET #: SH0035A**

**DOC**