



**SOLID STATE DEVICES, INC**

14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**PRELIMINARY**

**SSR4040CT**

## Designer's Data Sheet

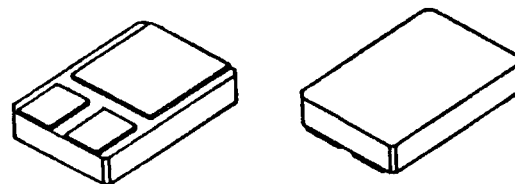
### FEATURES:

- Extremely Low Forward Voltage Drop
- Hermetically Sealed Power Surface Mount Package
- Guard ring for overvoltage protection
- Eutectic Die Attach
- 150°C Operating Junction Temperature

- TX, TXV, and Space Level Screening Available

**40 AMP  
40 VOLTS  
POSITIVE CENTERTAP  
SCHOTTKY RECTIFIER**

### MILPACK



## MAXIMUM RATINGS

| RATING                                                                                                                                  | SYMBOL             | VALUE       | UNIT  |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|
| Peak Repetitive Reverse<br>and DC Blocking Voltage                                                                                      | VRRM<br>VRWM<br>VR | 40          | Volts |
| Average Rectified Forward Current<br>(Resistive Load, 60Hz, Sine Wave, TA=25°C)                                                         | IO                 | 40          | Amps  |
| Peak Surge Current<br>(8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow<br>junction to reach equilibrium between pulses, TA=25°C) | IFSM               | 600         | Amps  |
| Operating and storage temperature                                                                                                       | Top & Tstg         | -65 to +150 | °C    |
| Maximum Thermal Resistance<br>Junction to Case, both legs tied together                                                                 | RθJC               | 1.0         | °C/W  |

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

**DATA SHEET#: RS0163 B**

**MED**

# SSR4040CT

PRELIMINARY

# SSDI

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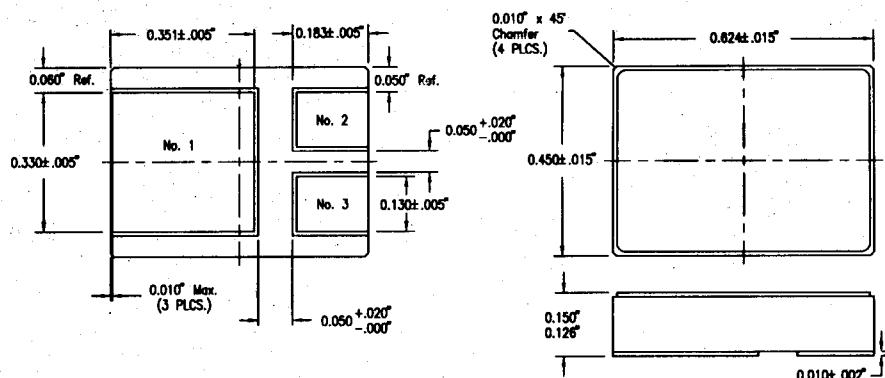
### ELECTRICAL CHARACTERISTICS (Per Leg)

| CHARACTERISTICS                                                                                                                                                                                                                                                                                   | SYMBOL     | MAXIMUM              | UNIT |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------|------|
| <b>Instantaneous Forward Voltage Drop</b><br>( $I_F = 5 \text{ A dc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)<br>( $I_F = 10 \text{ A dc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)<br>( $I_F = 20 \text{ A dc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) | <b>VF1</b> | 0.38<br>0.47<br>0.62 | Vdc  |
| <b>Instantaneous Forward Voltage Drop</b><br>( $I_F = 10 \text{ A dc}$ , $T_A = -55^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)                                                                                                                                                                     | <b>VF2</b> | 0.52                 | Vdc  |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)                                                                                                                                                                                      | <b>IR1</b> | 5                    | mA   |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)                                                                                                                                                                                     | <b>IR2</b> | 200                  | mA   |
| <b>Junction Capacitance</b><br>( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$ )                                                                                                                                                                                        | <b>CJ</b>  | 800                  | pf   |

### CASE OUTLINE: MILPACK

#### PIN OUT:

**PIN 1: CATHODE**  
**PIN 2: ANODE 1**  
**PIN 3: ANODE 2**



### TYPICAL OPERATING CURVES

( $T_A = 25^\circ\text{C}$  Unless otherwise specified)

