



PRELIMINARY

SOLID STATE DEVICES, INC

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

SSR1445CT/5



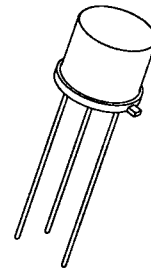
## Designer's Data Sheet

### FEATURES:

- Extremely Low Forward Voltage Drop
- Hermetically Sealed
- Guard ring for overvoltage protection
- Eutectic Die Attach
- 150°C Operating Junction Temperature
  
- TX, TXV, and Space Level Screening Available

7 AMP\*  
45 VOLTS  
CENTERTAP  
SCHOTTKY  
RECTIFIER

TO-5



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	45	Volts
	VRWM		
	VR		
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	14*	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	150	Amps
Operating and storage temperature	Top & Tstg	-65 to +150	°C
Maximum Thermal Resistance Junction to Case	RθJC	7.0	°C/W

\* 7 Amps per leg, 14 Amps total output

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

DATA SHEET#: RS0169 B

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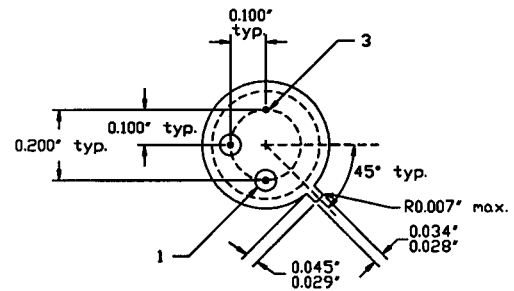
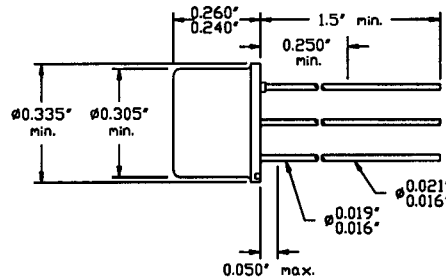
## ELECTRICAL CHARACTERISTICS (per leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) ( $I_F = 7 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	<b>VF1</b>	0.52 0.70	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3 \text{ Adc}$ , $T_A = -55^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	<b>VF2</b>	0.60	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)	<b>IR1</b>	100	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)	<b>IR2</b>	5	mA
<b>Junction Capacitance</b> ( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$ )	<b>CJ</b>	350	pf

## CASE OUTLINE: TO-5

### NOTES:

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



## TYPICAL OPERATING CURVES

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

