



PRELIMINARY

SSR1045/59

SOLID STATE DEVICES, INC

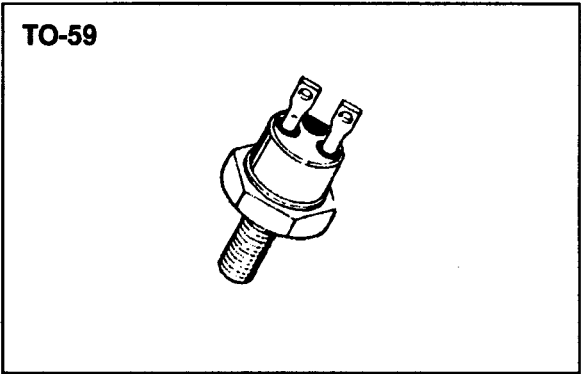
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**Designer's Data Sheet**

**10 AMP  
45 VOLTS  
SCHOTTKY  
RECTIFIER**

**FEATURES:**

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Isolated Hermetically Sealed Power Package
- Eutectic Die Attach
- 175°C Operating Temperature
  
- TX, TXV and Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>	VRRM	45	Volts
	VRWM		
	VR		
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	10	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	150	Amps
<b>Operating and storage temperature</b>	Top & Tstg	-65 to +175	°C
<b>Maximum Thermal Resistance</b> Junction to Case	RθJC	1.0	°C/W

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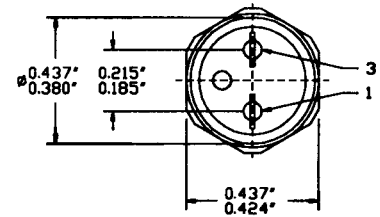
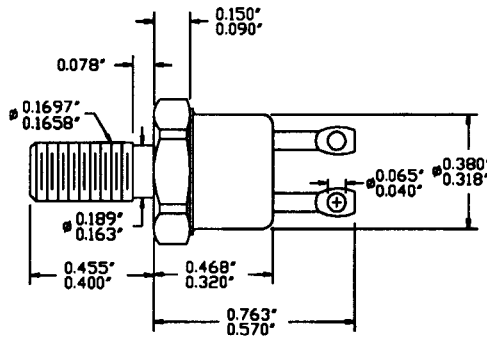
## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 5 Adc, TA=25°C, 300µs Pulse) (IF = 10 Adc, TA=25°C, 300µs Pulse)	<b>VF1</b>	0.52 0.63	Vdc
<b>Instantaneous Forward Voltage Drop</b> (IF = 5 Adc, TA= - 55°C, 300µs Pulse)	<b>VF2</b>	0.58	Vdc
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300µs pulse minimum)	<b>IR1</b>	100	µA
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300µs pulse minimum)	<b>IR2</b>	10	mA
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	<b>CJ</b>	400	pf

## CASE OUTLINE: TO-59

**PIN OUT:**

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



## TYPICAL OPERATING CURVES

(TA=25°C Unless otherwise specified)

