PRELIMINARY

SSR1645/59

SOLID STATE DEVICES, INC

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

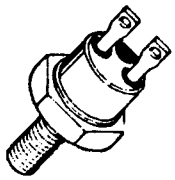
Designer's Data Sheet

20 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

TO-59



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	**Volts**
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	**Io**	20	**Amps**
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow junction to reach equilibrium between pulses, TA=25°C)	**I_{FSM}**	300	**Amps**
Operating and storage temperature	**Top & Tstg**	-65 to +175	**°C**
Maximum Thermal Resistance Junction to Case	**$R_{\theta JC}$**	1.0	**°C/W**

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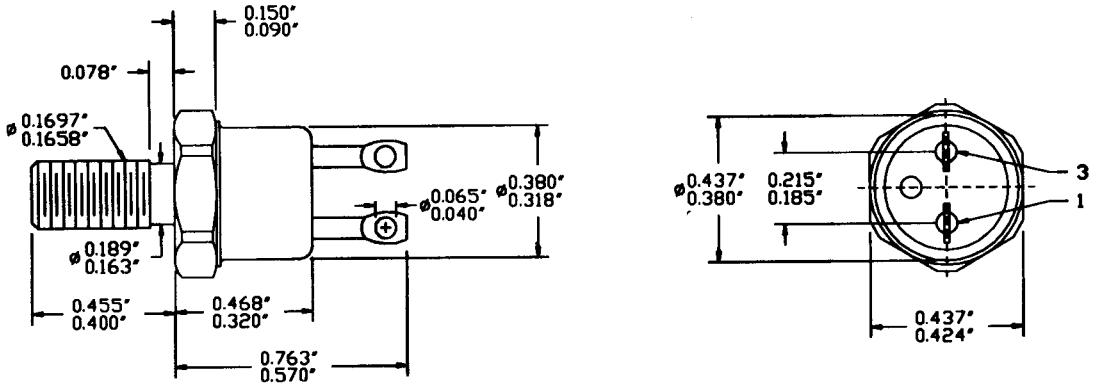
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (I_F = 5 Adc, T_A=25°C, 300µs Pulse) (I_F = 10 Adc, T_A=25°C, 300µs Pulse) (I_F = 20 Adc, T_A=25°C, 300µs Pulse)	V_{F1}	0.50 0.55 0.70	Vdc
Instantaneous Forward Voltage Drop (I_F = 10 Adc, T_A= - 55°C, 300µs Pulse)	V_{F2}	0.62	Vdc
Reverse Leakage Current (Rated VR, T_A=25°C, 300µs pulse minimum)	I_{R1}	200	µA
Reverse Leakage Current (Rated VR, T_A=100°C, 300µs pulse minimum)	I_{R2}	15	mA
Junction Capacitance (V_R = 10 Vdc, T_A=25°C, f= 1 MHz)	CJ	800	pf

CASE OUTLINE: TO-59

PIN OUT:

PIN 1: ANODE
PIN 3: CATHODE
STUD: N/C



TYPICAL OPERATING CURVES

(TA=25°C unless otherwise specfied)

