

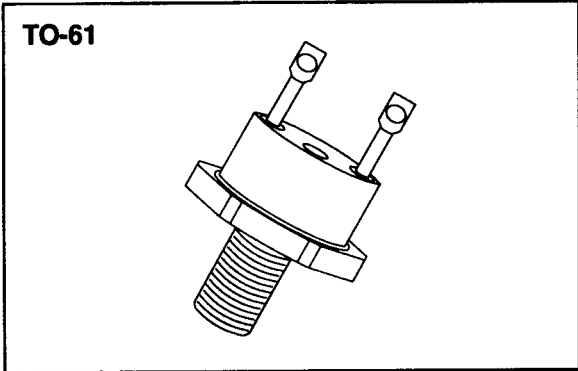
**SDR936/61
 thru
 SDR939/61**

Designer's Data Sheet

**30 AMP
 600-900 VOLTS
 80 nsec
 ULTRA FAST
 RECTIFIER**

- FEATURES:**
- Soft Recovery Diode
 - Ultrafast Recovery: 80 nsec Maximum
 - Available with faster recovery
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Package
 - Gold Eutectic Die Attach available
 - Ultrasonic Aluminum Wire Bonds

 - TX, TXV and Space Level Screening Available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM VRWM VR	600 700 800 900	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	30	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	450	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.3	°C/W

**SDR936/61
thru
SDR939/61**

PRELIMINARY



SOLID STATE DEVICES, INC

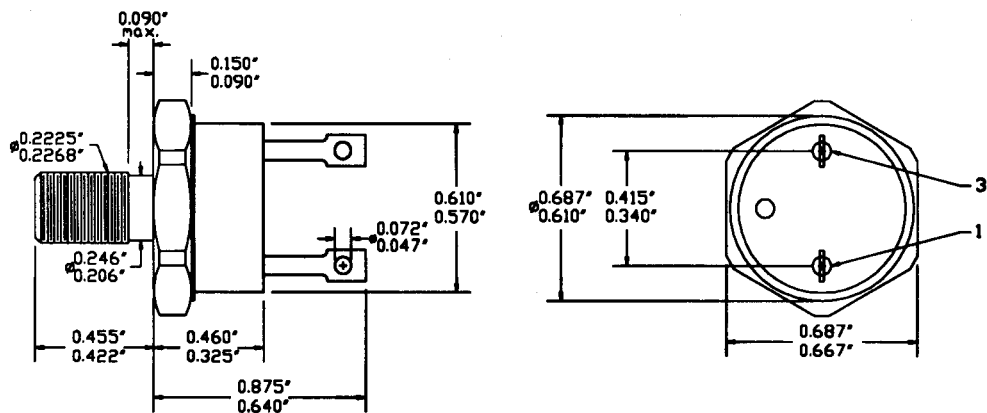
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 15 Adc, TA=25°C, 300ms Pulse) (IF = 30 Adc, TA=25°C, 300ms Pulse)	VF	1.25 1.40	Vdc
Instantaneous Forward Voltage Drop (IF = 30 Adc, TA= - 55°C, 300ms Pulse) (IF = 30 Adc, TA=100°C, 300ms Pulse)	VF	1.35 1.15	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300ms pulse minimum)	IR	100	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300ms pulse minimum)	IR	10	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	80	nsec

**CASE OUTLINE: TO-61
PIN OUT:**

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

