



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SDR936/61  
thru  
SDR939/61**

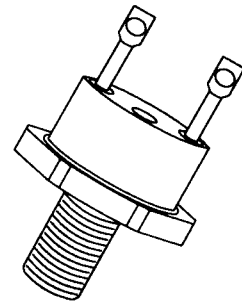
## Designer's Data Sheet

### 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

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

TO-61



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	600	Volts
	VRWM	700	
	SDR936/61	800	
	SDR937/61	900	
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

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

DATA SHEET#: RU0075 A

MED

**SDR936/61  
thru  
SDR939/61**

PRELIMINARY



**SOLID STATE DEVICES, INC**

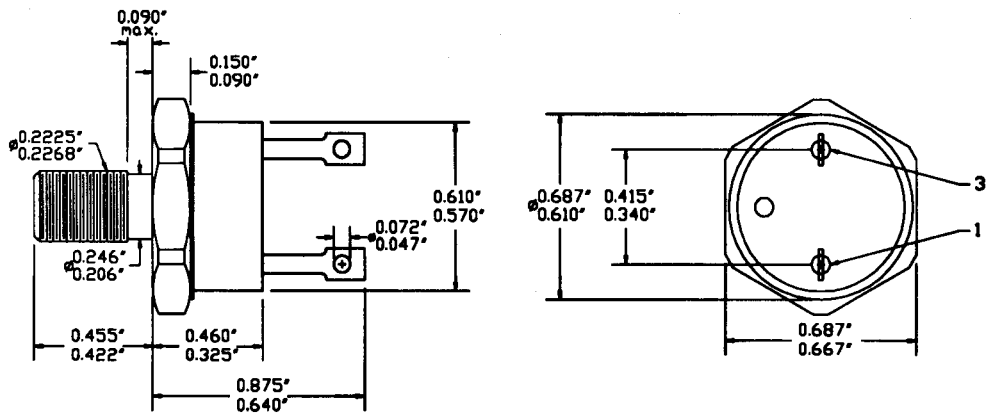
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**ELECTRICAL CHARACTERISTICS**

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

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

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



**TYPICAL OPERATING CURVES**  
TA=25°C Unless otherwise specified

