



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SDR953/61  
thru  
SDR955/61**

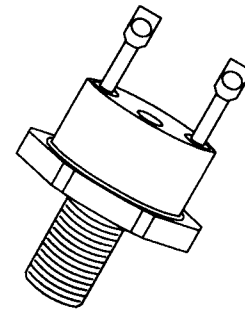
## Designer's Data Sheet

### FEATURES:

- Hyper Fast Recovery: 35 nsec Maximum
- 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

**50 AMP  
300-500 VOLTS  
35 nsec  
HYPER FAST  
RECTIFIER**

TO-61



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	300	Volts
	VRWM	400	
	VR	500	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	50	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	0.75	°C/W

\* Package limited

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

DATA SHEET#: RH0031 A

MED

# SDR953/61 thru SDR955/61

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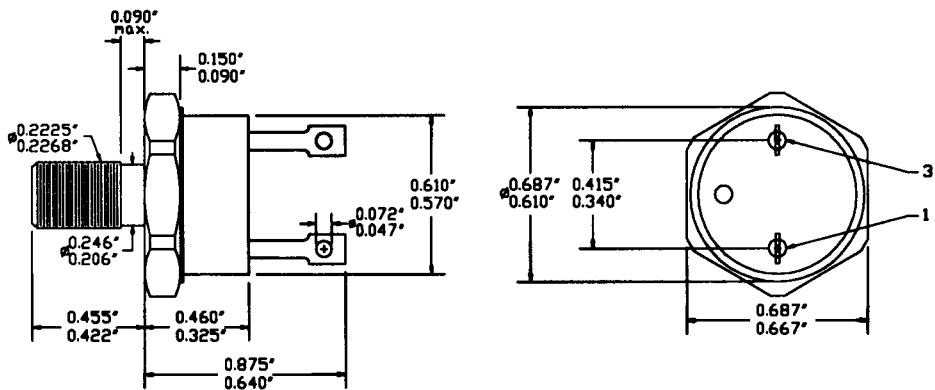
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## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA=25°C, 300μs Pulse) (IF = 50 Adc, TA=25°C, 300μs Pulse)	<b>VF</b>	1.30 1.65	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA= 100°C, 300μs Pulse) (IF = 25 Adc, TA= - 55°C, 300μs Pulse)	<b>VF</b>	1.2 1.4	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300μs pulse minimum)	<b>IR</b>	100	<b>μA</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300μs 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>	250	<b>pf</b>
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	<b>trr</b>	35	<b>nsec</b>

## CASE OUTLINE: TO-61

PIN 1: ANODE  
PIN 3: CATHODE



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

