



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**

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

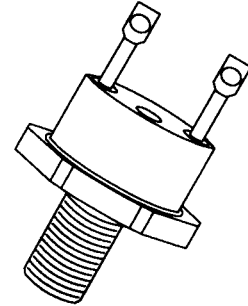
Designer's Data Sheet

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

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.
SSDI's for these devices should be reviewed by SSDI prior to release.

DATA SHEET#: RH0031 A

MED

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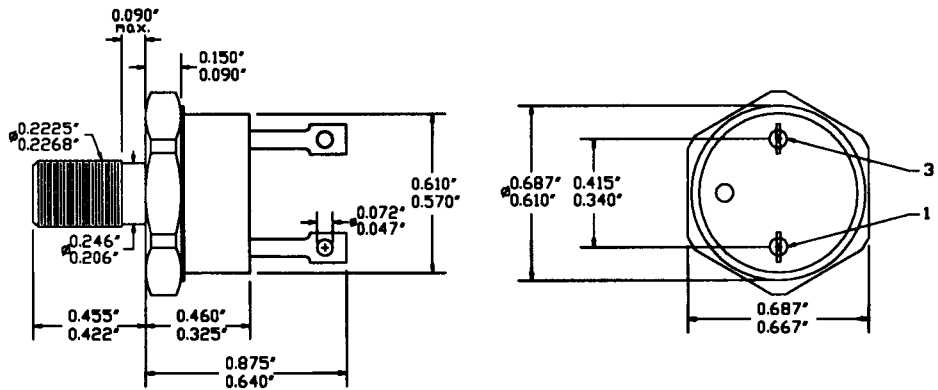
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300µs Pulse) (IF = 50 Adc, TA=25°C, 300µs Pulse)	VF	1.30 1.65	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA= 100°C, 300µs Pulse) (IF = 25 Adc, TA= - 55°C, 300µs Pulse)	VF	1.2 1.4	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	100	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	10	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	250	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	35	nsec

CASE OUTLINE: TO-61

PIN 1: ANODE
PIN 3: CATHODE



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

