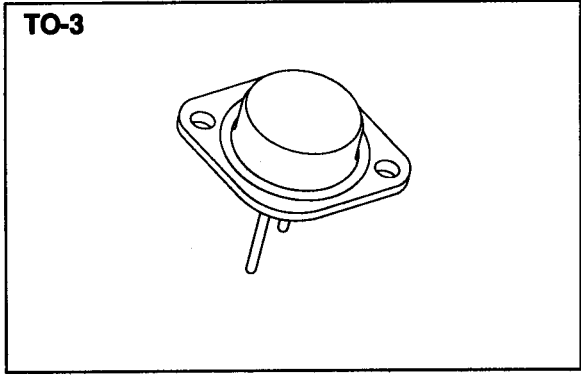


**SDR958/3
 thru
 SDR9511/3**

Designer's Data Sheet

**50 AMP
 800-1100 VOLTS
 80 nsec
 ULTRA FAST
 RECTIFIER**

- FEATURES:**
- Ultrafast Recovery: 60 nsec typical
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Forward Voltage Drop
 - 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	800	Volts
	VRWM	900	
	SDR958/3	1000	
	SDR959/3	1100	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	50	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 1	RθJC	1.2	°C/W

note 1 Pins 1 & 2 connected

SDR958/3 thru SDR9511/3

PRELIMINARY



SOLID STATE DEVICES, INC

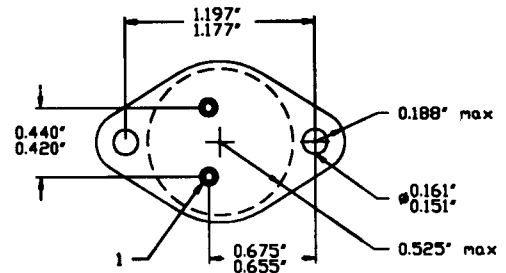
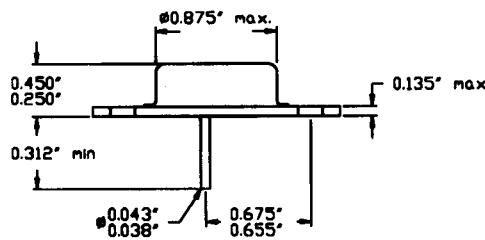
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300ms Pulse) note 1 (IF = 50 Adc, TA=25°C, 300ms Pulse) note 1	VF	1.40	Vdc
		1.55	
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=100°C, 300ms Pulse) note 1 (IF = 25 Adc, TA= - 55°C, 300ms Pulse) note 1	VF	1.30	Vdc
		1.50	
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	150	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	80	nsec

CASE OUTLINE: TO-3
CASE: CATHODE
PIN 1: ANODE
PIN 2: ANODE

Note 1:
Connect
Pin 1 & 2
together.



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

