

## Designer's Data Sheet

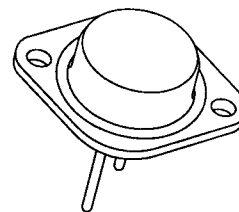
### FEATURES:

- 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
- Available in Common Anode and Doubler versions:  
 Common Anode: SDR950CT/3-SDR952CT/3  
 Doubler: SDR950DCT/3-SDR952DCT/3
- TX, TXV and Space Level Screening Available

**SDR950CT/3  
 thru  
 SDR952CT/3**

**120 AMP  
 100-200 VOLTS  
 35 nsec  
 HYPER FAST  
 COMMON CATHODE  
 CENTERTAP RECTIFIER**

TO-3



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	100	Volts
SDR950CT/3	VRWM	150	
SDR951CT/3	VR	200	
SDR952CT/3			
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	120	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 1	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, each individual diode	RθJC	1.0	°C/W
Junction to Case, both legs tied together		0.65	

note 1 Per leg.

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

**DATA SHEET#: RH0129 B**

# SDR950CT/3 thru SDR952CT/3

PRELIMINARY



SOLID STATE DEVICES, INC

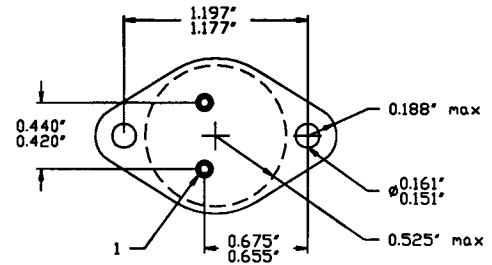
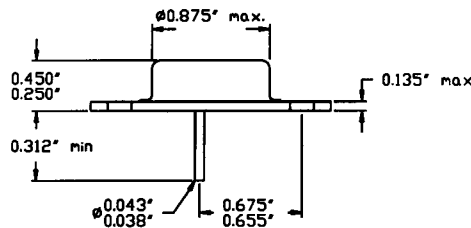
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

## ELECTRICAL CHARACTERISTICS (Per leg)

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)	VF	0.95 1.05	Vdc
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA= 100°C, 300µs Pulse) (IF = 25 Adc, TA= - 55°C, 300µs Pulse)	VF	0.85 1.20	Vdc
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300µs pulse minimum)	IR	100	µA
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300µs pulse minimum)	IR	10	mA
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	CJ	450	pf
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	35	nsec

## CASE OUTLINE: TO-3

ASE: CATHODE  
PIN 1: ANODE 1  
PIN 2: ANODE 2



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

