

Designer's Data Sheet

FEATURES:

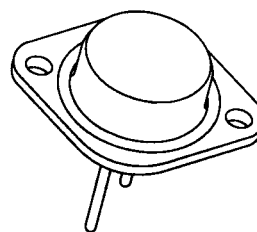
- Hyper Fast Recovery: 35 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds

- TX, TXV and Space Level Screening Available

**SDR953CT/3
 thru
 SDR955CT/3**

**100 AMP
 300-500 VOLTS
 35 nsec
 HYPER FAST
 COMMON CATHODE
 CENTERTAP RECTIFIER**

TO-3



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR953CT/3 SDR954CT/3 SDR955CT/3	VRRM VRWM VR	300 400 500	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	100	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Per Leg, TA=25°C)	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, both legs tied together	RθJC	1.0 0.65	°C/W

SDR953CT/3 thru SDR955CT/3

PRELIMINARY

SSDI
SOLID STATE DEVICES, INC

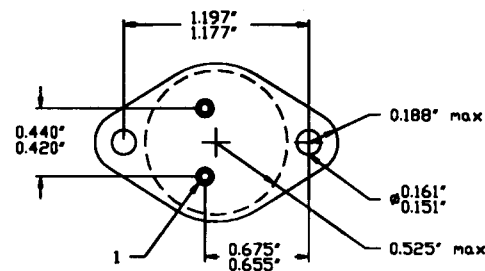
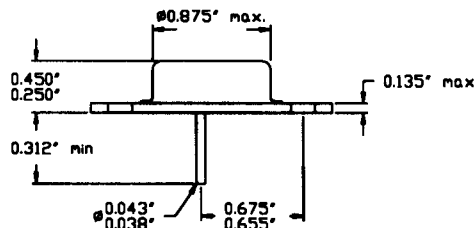
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300μs Pulse) note 1 (IF = 50 Adc, TA=25°C, 300μs Pulse) note 1	VF	1.25 1.50	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA= 100°C, 300μs Pulse) (IF = 25 Adc, TA= - 55°C, 300μs Pulse)	VF	1.15 1.35	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-3

CASE: CATHODE
PIN 1: ANODE 1
PIN 2: ANODE 2



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

