

**SDR9103CTNA&PA
 thru
 SDR9105CTNA&PA**

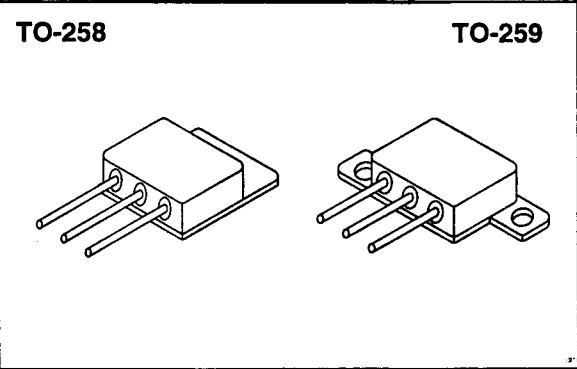
**100 AMP
 300-500 VOLTS
 35 nsec
 HYPER FAST
 CENTERTAP RECTIFIER
 40 MIL PINS**

Designer's Data Sheet

FEATURES:

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

- TX, TXV and Space Level Screening Available
- Common Anode and Doubler versions available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	300	Volts
SDR9103CTNA&PA SDR9104CTNA&PA SDR9105CTNA&PA	VRWM	400	
	VR	500	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	100	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave per leg, TA=25°C) note 2	IFSM	500	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, note 1	RθJC	0.73 0.4	°C/W

note 1 Both legs tied together
 note 2 Available with higher surge ratings

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PRELIMINARY



SOLID STATE DEVICES, INC

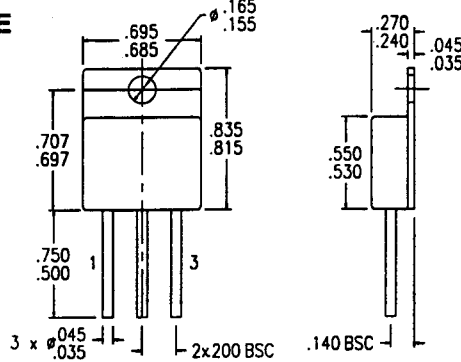
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS (Per leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300µs Pulse) (IF = 50 Adc, TA=25°C, 300µs Pulse)	VF	1.35 1.65	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=100°C, 300µs Pulse) (IF = 25 Adc, TA= - 55°C, 300µs Pulse)	VF	1.25 1.55	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

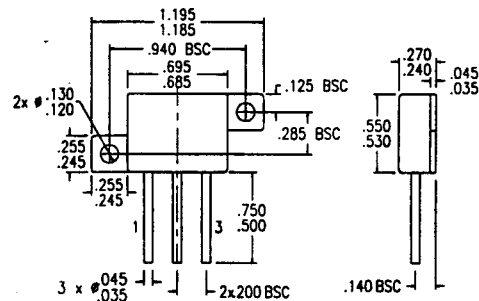
CASE OUTLINE: TO-258 (SUFFIX 'NA')

PIN 1: ANODE 1
PIN 2: CATHODE
PIN 3: ANODE 2



CASE OUTLINE: TO-259 (SUFFIX 'PA')

PIN 1: ANODE 1
PIN 2: CATHODE
PIN 3: ANODE 2



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

