

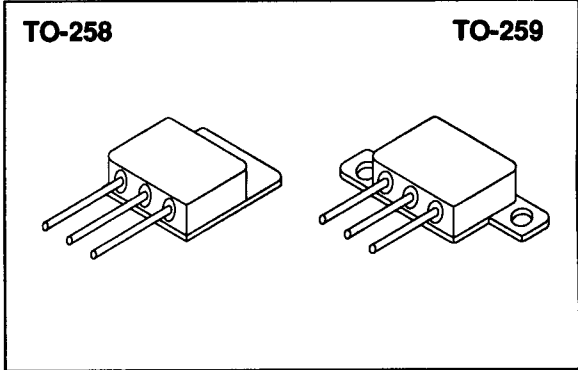
**SDR9100N&P
 thru
 SDR9102N&P**

Designer's Data Sheet

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

- 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 available

 - TX, TXV and Space Level Screening Available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR9100N&P SDR9101N&P SDR9102N&P	VRRM	100	Volts
	VRWM	150	
	VR	200	
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 & 2	IFSM	500	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 1	RθJC	0.4	°C/W

note 1 connect pins 2 & 3 together in application
 note 2 higher surge rating class available

SDR9100N&P thru SDR9102N&P

PRELIMINARY



SOLID STATE DEVICES, INC

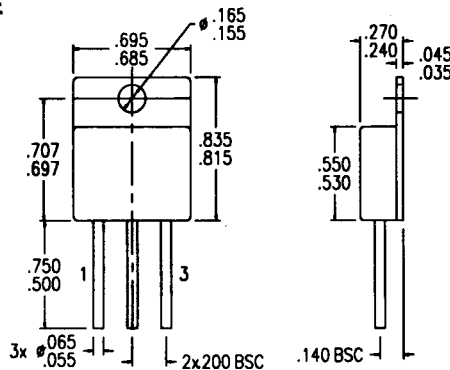
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 50 Adc, TA=25°C, 300µs Pulse) (IF = 100 Adc, TA=25°C, 300µs Pulse)	VF	1.05 1.25	Vdc
Instantaneous Forward Voltage Drop (IF = 50 Adc, TA=100°C, 300µs Pulse) (IF = 50 Adc, TA= - 55°C, 300µs Pulse)	VF	0.95 1.15	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	200	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	20	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	900	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	35	nsec

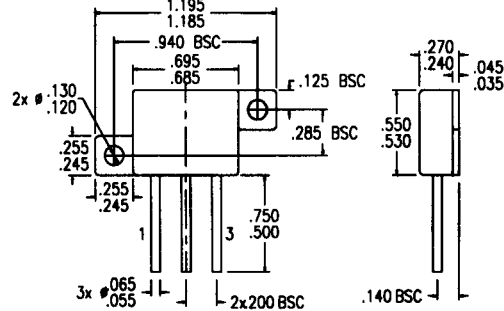
CASE OUTLINE: TO-258

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



CASE OUTLINE: TO-259

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

