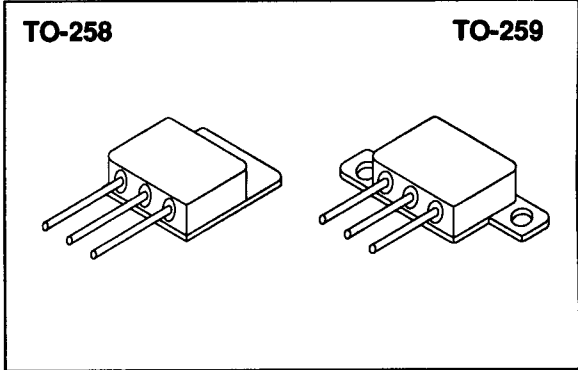


**SDR9100N&P  
 thru  
 SDR9102N&P**

**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
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>	<b>SDR9100N&amp;P</b>	100 150 200	<b>Volts</b>
	<b>SDR9101N&amp;P</b>		
	<b>SDR9102N&amp;P</b>		
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	<b>IO</b>	120	<b>Amps</b>
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 1 & 2	<b>IFSM</b>	500	<b>Amps</b>
<b>Operating and storage temperature</b>	<b>Top &amp; Tstg</b>	-65 to +200	<b>°C</b>
<b>Maximum Thermal Resistance</b> Junction to Case, note 1	<b>RθJC</b>	0.4	<b>°C/W</b>

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

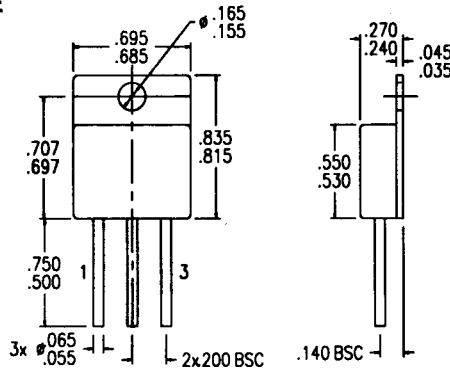
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 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

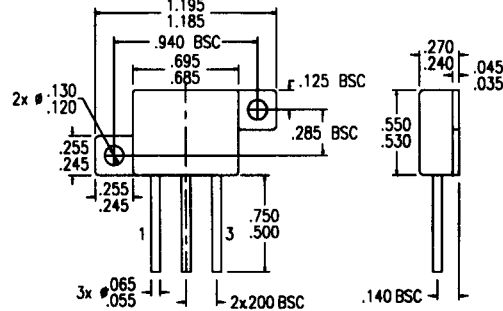
### CASE OUTLINE: TO-258

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

