

**SDR9100PHC
thru
SDR9102PHC**

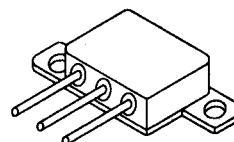
Designer's Data Sheet

FEATURES:

- Hot Case
- Hyper Fast Recovery: 35 nsec Maximum
- High Surge Rating
- Hermetically Sealed Low Profile Package
- Ultrasonic Aluminum Wire Bonds
- Ceramic Seals for improved hermeticity
- TX, TXV and Space Level Screening Available

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

TO-259



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR9100PHC SDR9101PHC SDR9102PHC	VRRM VRWM VR	100 150 200	Volts
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 Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C) note 1	IFSM	800	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 1	RθJC	0.35	°C/W

Note 1 All anodes (PIN 1-3) connected together

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

DATA SHEET#: RH0121 A

MED

SDR9100PHC thru SDR9102PHC

PRELIMINARY



SOLID STATE DEVICES, INC

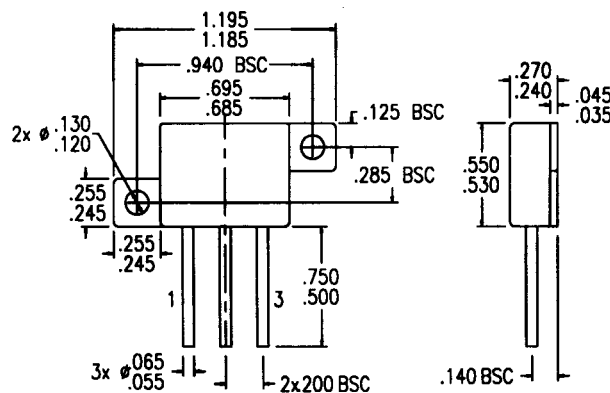
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 50 Adc, TA=25°C, 300μs Pulse)	V _F	0.9	V _{dc}
Instantaneous Forward Voltage Drop (IF = 50 Adc, TA= - 55°C, 300μs Pulse)	V _F	1.0	V _{dc}
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	I _R	200	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300μs pulse minimum)	I _R	20	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	C _J	900	pf
Reverse Recovery Time (IF=500mA, I _R =1 A, I _{RR} =250mA, TA=25°C)	t _{rr}	35	nsec

CASE OUTLINE: TO-259

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

