



PRELIMINARY

SOLID STATE DEVICES, INC

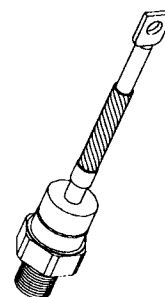
 14849 Firestone Boulevard · La Mirada, CA 90638
 Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**SDR9600S10
thru
SDR9600S20**
Designer's Data Sheet
FEATURES:

- Forward current to 600 Amps
- PIV to 2000 Volts
- Transient Voltage rating of 200 Volts above PIV
- Pressure contact device
- Single Chip construction
- Low forward voltage drop
- Hermetically sealed
- For High Power applications
- For reverse polarity ad suffix "R"
- Fast Recovery version available (0.7 usec typical)
- Higher Voltage versions up to 5000 volts available
- TX, TXV, and Space Level Screening available

**600 AMPS
1000-2000 VOLTS
25μsec
STANDARD RECOVERY
HIGH CURRENT RECTIFIER**

DO-9


MAXIMUM RATINGS

RATING (Note 1)	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR9600S10 SDR9600S15 SDR9600S20	VRRM VRWM VR	1000 1500 2000	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	600	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	5000	Amps
Operating and storage temperature	Top & Tstg	-55 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	0.14	°C/W

Note 1: Mounting force=1000 lbs

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

DATA SHEET#: RP0009 A

RMD

SDR9600S10 thru SDR9600S20

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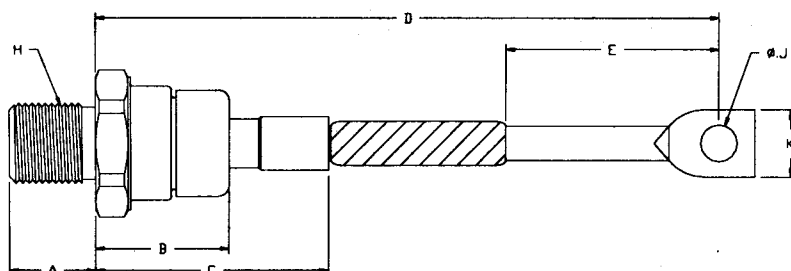
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 600 A dc pulse, TJ=25°C)	V _F	1.25	V _{dc}
Instantaneous Forward Voltage Drop (IF = 600 A dc pulse, TJ= +175°C)	V _F	1.20	V _{dc}
Reverse Leakage Current (Rated VR pulse, TJ=25°C)	I _R	2	mA
Reverse Leakage Current (Rated VR pulse, TJ=175°C)	I _R	40	mA
Reverse Recovery Time (IFM=600 A, VR=400V, di/dt= -25μs, Rs=10Ω, Cs=0.5μF, TA=25°C)	t _{rr}	25	μsec

CASE OUTLINE: DO-9



DIM	MIN	MAX
A	0.79"	0.83"
B	---	1.6"
C	---	2.25"
D	5.00"	6.00"
E	0.8"	2.2" typ
F	1.212"	1.250"
G	0.063"	0.172"
H	0.75-16UNF	
J	0.265"	0.350"
K	0.530"	0.755"

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

