



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SDRP800S10
thru
SDRP800S20**

Designer's Data Sheet

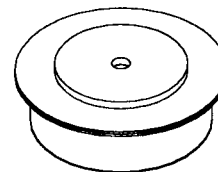
FEATURES:

- Forward current to 800 Amps
- PIV to 2000 Volts
- Transient Voltage rating of 200 Volts above PIV
- Pressure contact device (mounting force:1000 lbs)
- Single Chip construction
- Low forward voltage drop
- Hermetically sealed
- For High Power applications
- Fast Recovery version available (0.7 usec typical)
- Higher Voltage versions up to 5000 volts available
- TX, TXV, and Space Level Screening available

**800 AMPS
1000-2000 VOLTS
25μsec**

**STANDARD RECOVERY
HIGH CURRENT RECTIFIER**

HOCKEY PUCK



MAXIMUM RATINGS

RATING (Note 1)	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDRP800S10 SDRP800S15 SDRP800S20	VRRM VRWM VR	 1000 1500 2000	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	800	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	6500	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#: RP0005 A

RMD

SDRP800S10 thru SDRP800S20

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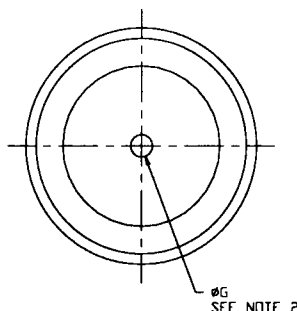
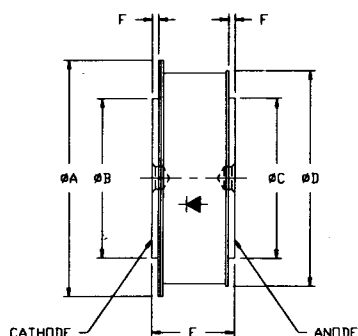
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 800 A dc pulse, TJ=25°C)	VF	1.35	Vdc
Instantaneous Forward Voltage Drop (IF = 800 A dc pulse, TJ= +175°C)	VF	1.30	Vdc
Reverse Leakage Current (Rated VR pulse, TJ=25°C)	IR	2	mA
Reverse Leakage Current (Rated VR pulse, TJ=175°C)	IR	40	mA
Reverse Recovery Time (IFM=800 A, VR=400V, di/dt= -25μs, Rs=10Ω, Cs=0.5μF, TA=25°C)	trr	25	μsec

CASE OUTLINE: HOCKEY PUCK



DIMENSIONS	
øA	1.47"
øB	0.995" ± .005
øC	1.000" ± .005
øD	1.34"
E	0.52"
F	.020"
øG	.140" (note 2)

Notes:

1. Tolerance on all dimensions to be ±.020" unless otherwise specified.
2. 0.068" ± .005 Deep (2 pl) .020" x 45° chamf

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

