



PRELIMINARY

SOLID STATE DEVICES, INC

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



**SDR3PF
thru
SDR3WF**

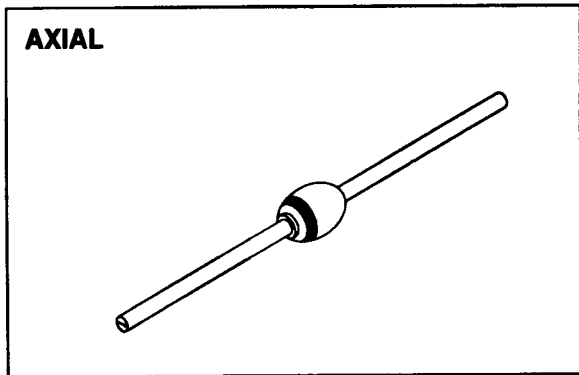
Designer's Data Sheet

FEATURES:

- Fast Recovery: 650 nsec maximum
- PIV to 1800 Volts
- Low Reverse Leakage Current
- Hermetically Sealed
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance

- TX, TXV, and Space Level Screening available

**3 AMPS
1300-1800 VOLTS
650 nsec
FAST RECOVERY
RECTIFIER**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR3PF SDR3RF SDR3SF SDR3TF SDR3VF SDR3WF	VRRM VRWM VR	1300 1400 1500 1600 1700 1800	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	3	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	75	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, L=3/8"	RθJL	20	°C/W

SDR3PF thru SDR3WF

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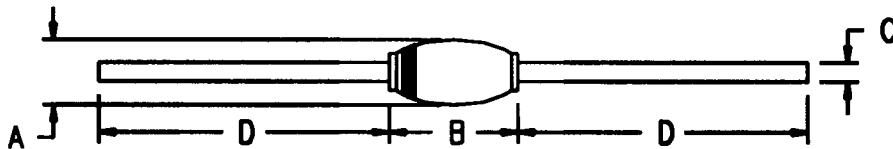
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 3 Adc, TA=25°C, 300µs Pulse)	VF	1.35	Vdc
Instantaneous Forward Voltage Drop (IF = 3 Adc, TA= - 55°C, 300µs Pulse)	VF	1.5	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	5	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	500	µA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	40	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	t _{rr}	650	nsec

CASE OUTLINE: AXIAL



DIMENSIONS		
DIM	MIN	MAX
A	---	.200"
B	---	.230"
C	.047"	.053"
D	1.00"	---

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

