



PRELIMINARY

# SOLID STATE DEVICES, INC

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

**SDR10A  
thru  
SDR10M**

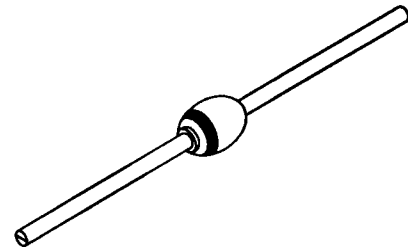
## Designer's Data Sheet

### FEATURES:

- Standard Recovery: 5  $\mu$ sec maximum
- PIV to 1000 Volts
- Replaces larger DO-4 Rectifiers
- Hermetically Sealed
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
- Available in surface mount versions
- Faster recovery devices are available
  
- TX, TXV, and Space Level Screening available

**10 AMPS  
50-1000 VOLTS  
5  $\mu$ sec  
STANDARD RECOVERY  
RECTIFIER**

AXIAL



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	SDR10A SDR10B SDR10D SDR10G SDR10J SDR10K SDR10M	VRRM 100 200 VRWM 400 600 VR 800 1000	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	10	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	150	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, L=3/8"	R $\theta$ JL	6	°C/W

# SDR10A thru SDR10M

PRELIMINARY



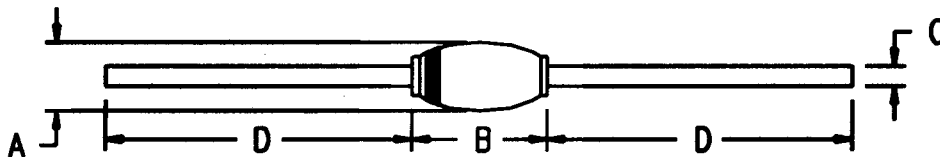
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## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300µs Pulse)	VF	1.25	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= - 55°C, 300µs Pulse)	VF	1.40	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	200	µA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz )	CJ	80	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	5	µsec

## CASE OUTLINE: AXIAL



### DIMENSIONS

DIM	MIN	MAX
A	---	.200"
B	.150"	.180"
C	.057"	.063"
D	.40"	---

## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

