

**SDR1AHF
thru
SDR1NHF**

Designer's Data Sheet

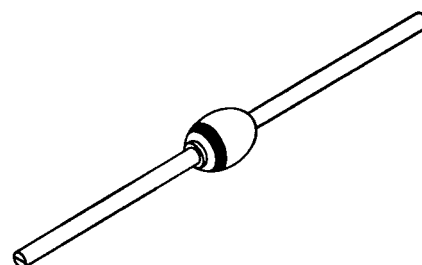
FEATURES:

- Hyper Fast Recovery: 30 nsec Maximum
- PIV to 1200 Volts
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Single Chip Construction
- Low Reverse Leakage

- TX, TXV and Space Level Screening

**1 AMP
50-1200 VOLTS
30 nsec
HYPER FAST
RECTIFIER**

AXIAL



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	SDR1AHF SDR1BHF SDR1DHF SDR1GHF SDR1JHF SDR1KHF SDR1MHF SDR1NHF	VRRM VRWM VR	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	1	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	25	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, L=3/8"	RθJL	35	°C/W

SDR1AHF thru SHF1NHF

PRELIMINARY



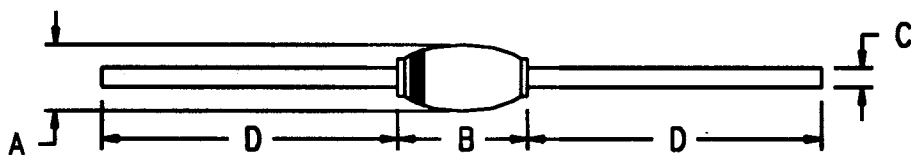
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 1 Adc, TA=25°C, 300μs Pulse)	SDR1AHF-SDR1JHF SDR1KHF-SDR1NHF	VF	3.3 3.5	Vdc
Instantaneous Forward Voltage Drop (IF = 1 Adc, TA= - 55°C, 300μs Pulse)	SDR1AHF-SDR1JHF SDR1KHF-SDR1NHF	VF	3.4 3.6	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	20	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)		trr	30	nsec

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	---	.150"
B	---	.190"
C	.027"	.033"
D	1.00"	---

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

