

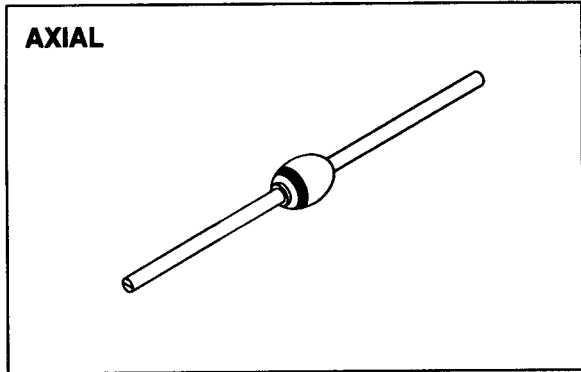
**SDR2G
 thru
 SDR2N**

Designer's Data Sheet

**1 AMP
 400-1200 VOLTS
 50-80 nsec
 ULTRA FAST
 RECTIFIER**

FEATURES:

- Ultra Fast Recovery: 50-80 nsec Max. @ 25°C
 80-120 nsec Max. @ 100°C
- Single Chip Construction
- PIV to 1200 Volts
- Low Reverse Leakage Current
- Hermetically Sealed
- For High Efficiency Applications
- Available in Surface Mount versions
- Metallurgically Bonded
- TX, TXV and Space Level Screening Available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR2G SDR2J SDR2K SDR2M SDR2N	VRRM VRWM VR	400 600 800 1000 1200	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

SDR2G thru SDR2N

PRELIMINARY



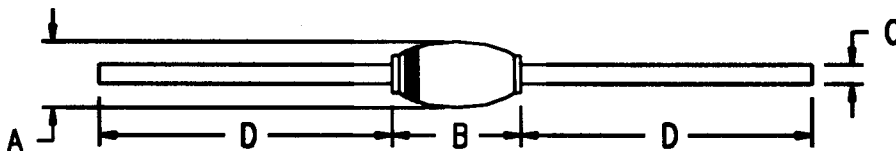
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ Adc}$, $T_A = 25^\circ\text{C}$, $300\mu\text{s}$ Pulse)	SDR2G-J SDR2K-N	V_F	1.9 2.1	Vdc
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ Adc}$, $T_A = -55^\circ\text{C}$, $300\mu\text{s}$ Pulse)	SDR2G-J SDR2K-N	V_F	2.05 2.25	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, $300\mu\text{s}$ pulse minimum)		I_R	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, $300\mu\text{s}$ pulse minimum)		I_R	0.5	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)		C_J	20	pf
Reverse Recovery Time ($I_F = 500\text{ma}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	SDR2G-J SDR2K SDR2M SDR2N	t_{rr}	50 60 70 80	nsec

CASE OUTLINE:



DIMENSIONS

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

TYPICAL OPERATING CURVES

$T_A = 25^\circ\text{C}$ Unless otherwise specified

