

Designer's Data Sheet

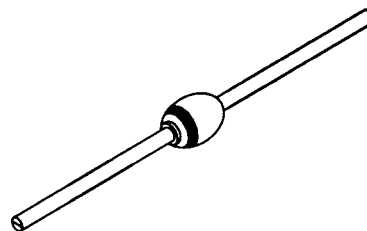
FEATURES:

- Ultra Fast Recovery: 50-80 nsec Max. @ 25°C
 85-125 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

**SDR3A
 thru
 SDR3N**

**3 AMP
 50-1200 VOLTS
 50-80 nsec
 ULTRA FAST
 RECTIFIER**

AXIAL



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	SDR3A SDR3B SDR3D SDR3G SDR3J SDR3K SDR3M SDR3N	50 100 200 400 600 800 1000 1200	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

NOTE: All specifications are subject to change without notification.
 SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RU0013 A

RMD

SDR3A thru SDR3N

PRELIMINARY



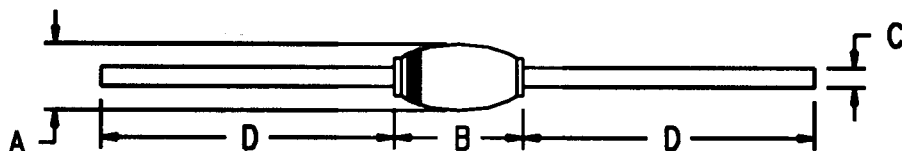
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	SDR3A-3J SDR3K-3N	V_F	1.7 1.9	Vdc
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	SDR3A-3J SDR3K-3N	V_F	1.9 2.1	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)		I_R	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs 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	40	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1 \text{ A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	SDR3A-3J SDR3K SDR3M SDR3N	t_{rr}	50 60 70 80	nsec

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	.120"	.180"
B	.130"	.230"
C	.047"	.053"
D	1.00"	---

TYPICAL OPERATING CURVES

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

