

**SDR6K
and
SDR6M**

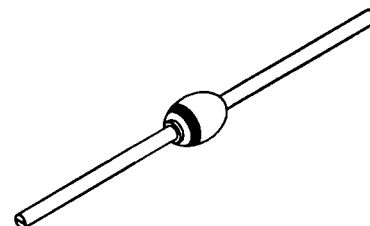
Designer's Data Sheet

FEATURES:

- Ultra Fast Recovery: 60-70 nsec Max. @ 25°C
115-120 nsec Max. @ 100°C
- Single Chip Construction
- PIV to 1000 Volts
- Low Reverse Leakage Current
- Hermetically Sealed
- Replaces larger DO-4 Rectifiers
- Available in Surface Mount versions
- Metallurgically Bonded
- TX, TXV and Space Level Screening Available

**6 AMP
800-1000 VOLTS
60-70 nsec
ULTRA FAST
RECTIFIER**

AXIAL



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR6K SDR6M	VRRM VRWM VR	800 1000	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	6	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"	RθJL	12	°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 #: RU0017 A

RMD

SDR6K thru SDR6M

PRELIMINARY



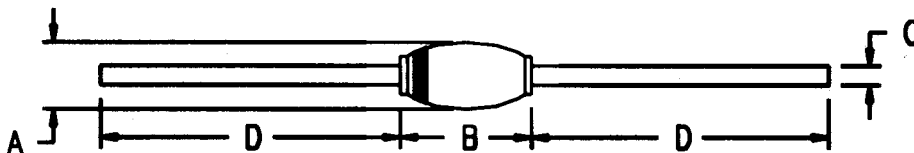
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 6 \text{ A}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	V_F	1.9	Vdc
Instantaneous Forward Voltage Drop ($I_F = 6 \text{ A}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	V_F	2.1	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	I_R	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	I_R	1	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)	C_J	80	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	t_{rr}	60 70	nsec

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	---	.200"
B	---	.270"
C	.055"	.063"
D	.400"	---

TYPICAL OPERATING CURVES

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

