

Designer's Data Sheet

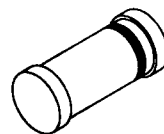
FEATURES:

- Ultra Fast Recovery: 50-70 nsec Max. @ 25°C
80-120 nsec Max. @ 100°C
- PIV to 1000 Volts
- Hermetically Sealed
- Low Reverse Leakage Current
- Single Chip Construction
- For High Efficiency Applications
- Available in both round and square tab versions
- Available in axial lead versions
- TX, TXV and Space Level Screening

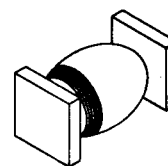
**SDR2GSM&SMS
thru
SDR2MSM&SMS**

**1 AMP
400-1000
50-70nsec
ULTRA FAST
RECTIFIER**

SM(ROUND)



SMS(SQUARE)



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR2GSM, SMS SDR2JSM, SMS SDR2KSM, SMS SDR2MSM, SMS	VRRM VRWM VR	400 600 800 1000	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 End Tab	RθJE	28	°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 #: RU0007 A

RMD

SDR2GSM&SMS thru SDR2MSM&SMS

PRELIMINARY



SOLID STATE DEVICES, INC

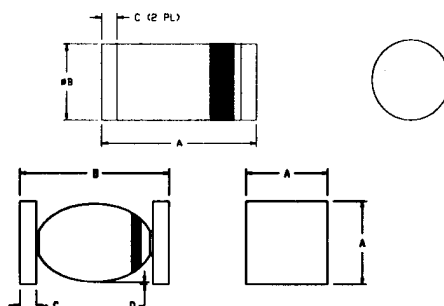
14849 Firestone Boulevard · La Mirada, CA 90638
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1\text{Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	SDR2GSM-MSM SDR2GSMS-JSMS SDR2KSMS-MSMS	V_F	2.8 1.9 2.1	Vdc
Instantaneous Forward Voltage Drop ($I_F = 1\text{Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	SDR2GSM-MSM SDR2GSMS-JSMS SDR2KSMS-MSMS	V_F	2.95 2.05 2.25	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	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-JSM&SMS SDR2KSM&SMS SDR2MSM&SMS	t_{rr}	50 60 70	nsec

DIMENSIONS(SM)

DIM	MIN.	MAX.
A	.190"	.210"
B	.095"	.105"
C	.010"	.030"



Dimensions are prior to solder dipping

DIMENSIONS (SMS)

DIM	MIN.	MAX.
A	.127"	.140"
B	.200"	.280"
C	.022"	.028"
D	.002"	---

TYPICAL OPERATING CURVES

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

