RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

SD101BWS

SCHOTTKY DIODES

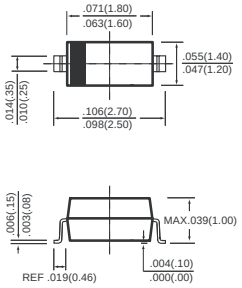
FEATURES

* Low Forward Voltage Drop
* Guard Ring Construction for Transient Protection
* Negligible Reverse Recovery Time

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.004 grams

SOD-323



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (@T_A=25°C unless otherwise noted)

RATINGS	SYMBOL	SD101BWS	UNITS
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RMR} V_{RWR} V_R	50	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	Volts
Maximum Forward Comtinuous Current	I_{FM}	15	mAmps
Non-Repetitive Peak Forward Surge Current @t<1.0S @t=10μS	IFSM	50 2.0	mAmps Amps
Maximum Power Dissipation	P_D	200	mW
Thermal Resistance junction to ambient	RθJA	300	°C/W
Operating and Storage Temperature Range	T_J,T_{STG}	-65 to + 125	°C

ELECTRICAL CHARACTERISTICS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	(IR=10μA)	V(BR)R	50	-	-	V
Reverse voltage leakage current	(V_R=40V)	I_R	-	-	0.2	μA
Forward voltage	(I_F=1.0mA) (I_F=15mA)	V_F	-	- -	0.40 0.95	V
Capacitance between terminals	(V_R=0V,f=1MHz)	C_T	-	-	2.1	pF
Reverse Recovery Time	(I_F=I_R=5mA,R_L=100Ω,I_{rr}=0.1xI_R)	t_{rr}	-	-	1.0	ns

RATING AND CHARACTERISTICS CURVES (SD101BWS)

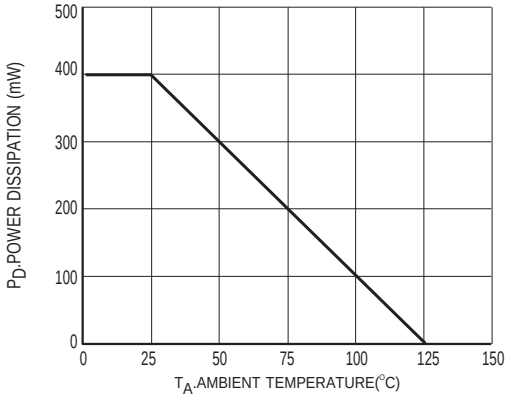


Figure1 Power Derating Curve

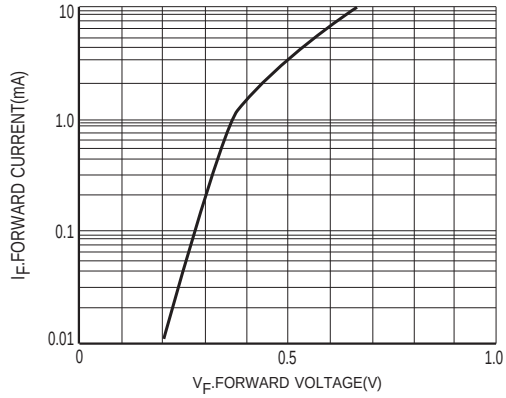


Figure2 Typical Forward Characteristics

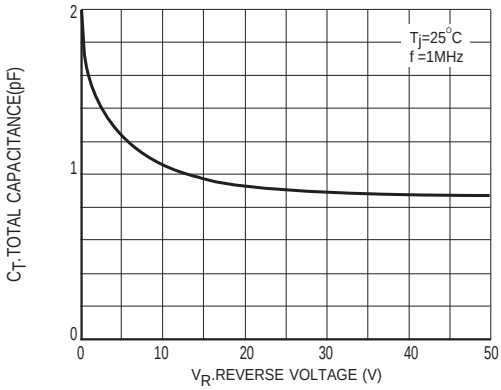


Figure3 Typical Total Capacitance vs Reverse Voltage

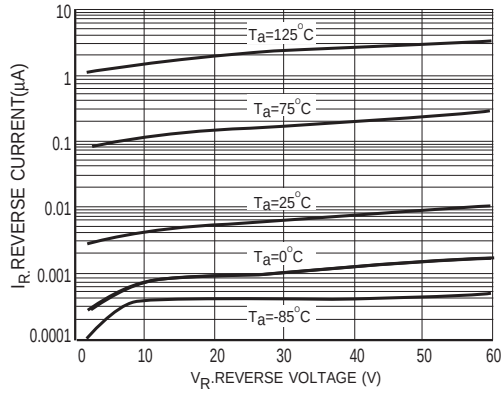


Figure4 Typical Reverse Characteristics

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