

SMALL SIGNAL DIODE
VOLTAGE RANGE 50 Volts

FEATURES

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

MECHANICAL DATA

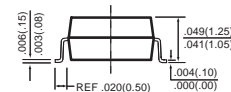
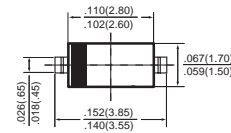
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

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%.



SOD-123



Dimensions in inches and (millimeters)

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

RATINGS		SYMBOL	SD101BW	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM} V_{RWM} V_R	50	Volts
Maximum Working Peak reverse Voltage				
Maximum DC Blocking Voltage				
Maximum RMS Voltage		V_{RMS}	35	Volts
Maximum Reverse Breakdown Voltage($I_R=10\mu A$)		$V_{(BR)R}$	50	Volts
Forward Continuous Current		I_{FM}	15	mAmps
Non-Repetitive Peak Forward Surge Current	@ $t < 1.0s$	I_{FSM}	50	mAmps
	@ $t = 10\mu s$		2.0	Amps
Typical Reverse Recovery Time($I_F=I_R=5mA, I_{rr}=0.1X I_R, R_L=100\Omega$)		T_{rr}	1.0	nS
Typical Junction Capacitance($V_R=0V, f=1MHz$)		C_T	2.1	pF
Maximum Power Dissipation		P_D	400	mW
Typical Thermal Resistance		$R_{\theta JA}$	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	SD101BW	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F=1.0mA$	V_F	0.40	Volts
	@ $I_F=15mA$		0.95	
Maximum Instantaneous Reverse Current	@ $V_R=40V$	I_R	0.2	uAmps

RATING AND CHARACTERISTICS CURVES (SD101BW)

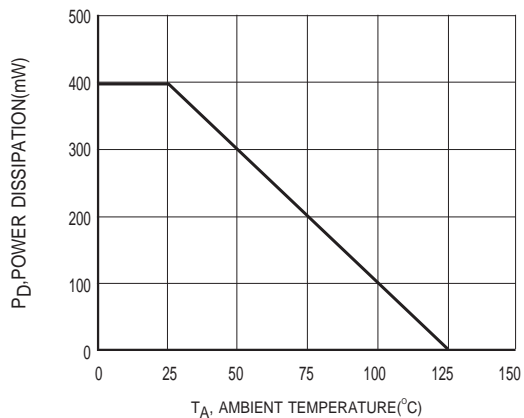


Figure1 Power Derating Curve

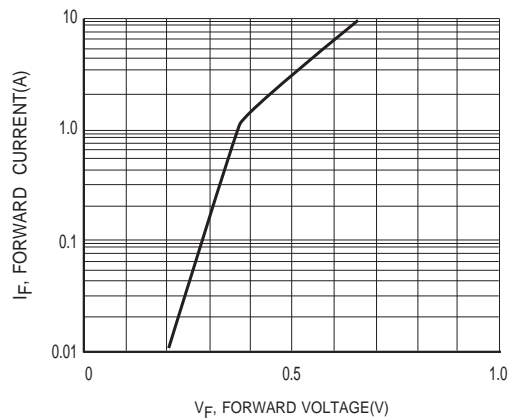


Figure2 Typical Forward Characteristics

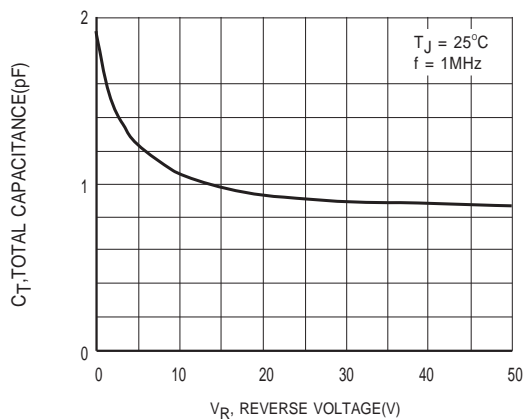


Figure3 Typical Total Capacitance vs Reverse Voltage

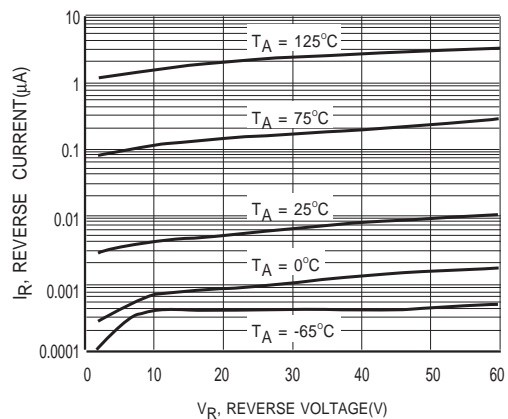


Figure4 Typical Reverse characteristics

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