

SMALL SIGNAL DIODE
VOLTAGE RANGE 40 Volts

FEATURES

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

MECHANICAL DATA

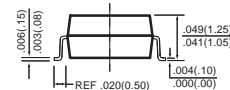
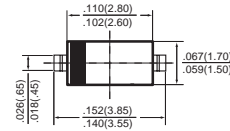
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

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	SD101CW	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum Working Peak reverse Voltage	V_{RWM}		
Maximum DC Blocking Voltage	V_R		
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum Reverse Breakdown Voltage($I_R=10\mu A$)	$V_{(BR)R}$	40	Volts
Forward Continuous Current	I_{FM}	15	mAmps
Non-Repetitive Peak Forward Surge Current	@ $t < 1.0s$	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	2.2	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	SD101CW	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F=1.0mA$	0.39	Volts
	@ $I_F=15mA$	0.90	
Maximum Instantaneous Reverse Current	@ $V_R=30V$	0.2	uAmps

RATING AND CHARACTERISTICS CURVES (SD101CW)

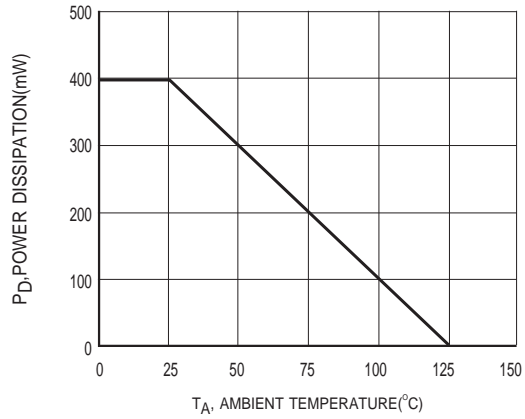


Figure1 Power Derating Curve

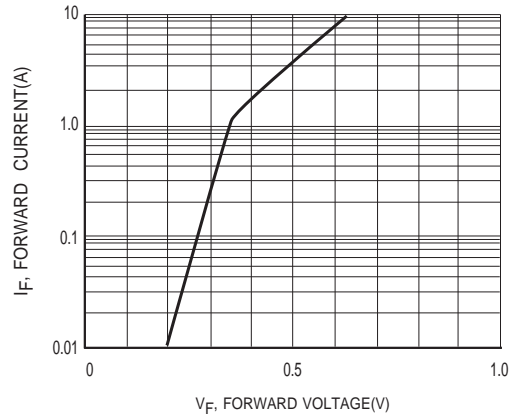


Figure2 Typical Forward Characteristics

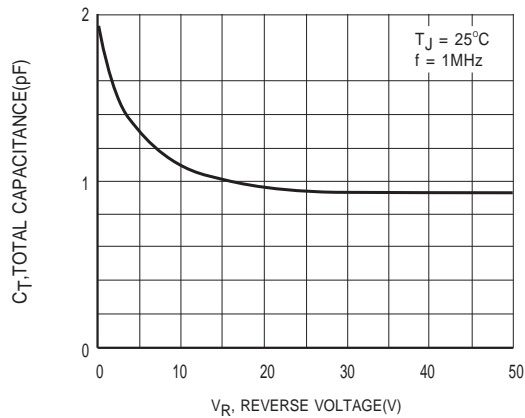


Figure3 Typical Total Capacitance vs Reverse Voltage

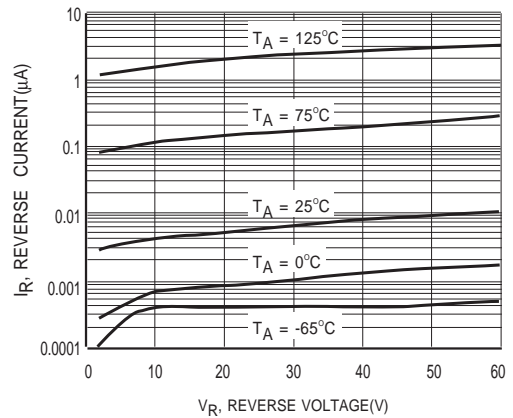


Figure4 Typical Reverse characteristics

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