

SMALL SIGNAL DIODE
VOLTAGE RANGE 40 Volts

FEATURES

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

MECHANICAL DATA

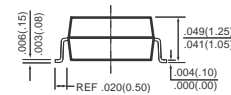
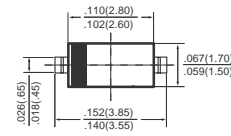
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

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 (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	SD103AW	UNITS
Reverse Breakdown Voltage @ I _R =10μA	V _{(BR)R}	40	Volts
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 _{R(RMS)}	28	Volts
Maximum Forward Continuous Current	I _{FM}	350	mAmps
Repetitive Peak Forward Current @ t<1.0S	I _{FRM}	1.5	Amps
Typical Reverse Recovery Time(I _F =I _R =200mA, I _{rr} =0.1X I _R , R _L =100)	T _{rr}	10	nS
Typical Junction Capacitance(V _R =0V, f=1.0MHz)	C _T	50	pF
Maximum Power Dissipation	PD	400	mW
Typical Thermal Resistance	R _{JA}	300	°C/W
Operating and Storage Temperature Range	T _{STG}	-65 to + 125	°C

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

CHARACTERISTICS		SYMBOL	SD103AW	UNITS
Maximum Instantaneous Forward Voltage	@ I _F =20mA	V _F	0.37	Volts
	@ I _F =200mA		0.60	
Maximum Instantaneous Reverse Current	@ V _R =30V	I _R	5.0	μAmps

RATING AND CHARACTERISTICS CURVES (SD103AW)

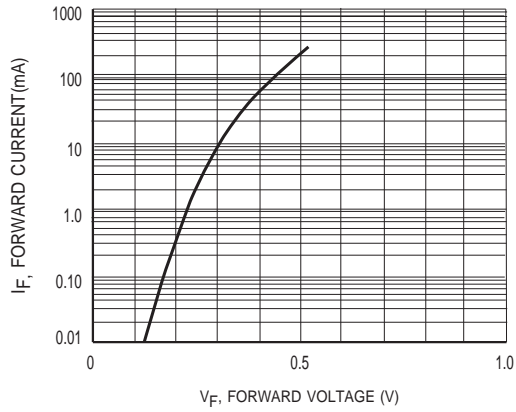


Figure1 Typical Forward Characteristics

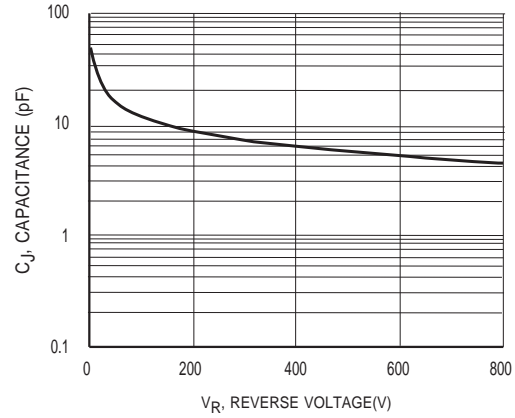


Figure2 Typical Junction Capacitance vs Reverse Voltage

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