

SMALL SIGNAL DIODE
VOLTAGE RANGE 60 Volts

FEATURES

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

MECHANICAL DATA

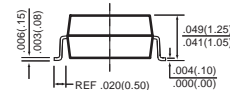
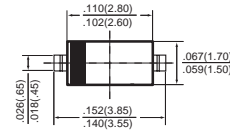
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

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 | SD101AW | UNITS |
|--|-----------------|--------------|-------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 60 | Volts |
| Maximum Working Peak reverse Voltage | V_{RWM} | | |
| Maximum DC Blocking Voltage | V_R | | |
| Maximum RMS Voltage | V_{RMS} | 42 | Volts |
| Maximum Reverse Breakdown Voltage($I_R=10\mu A$) | $V_{(BR)R}$ | 60 | 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 | 2.0 | 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 | SD101AW | UNITS |
|---------------------------------------|---------------|---------|-------|
| Maximum Instantaneous Forward Voltage | @ $I_F=1.0mA$ | 0.41 | Volts |
| | @ $I_F=15mA$ | 1.00 | |
| Maximum Instantaneous Reverse Current | @ $V_R=50V$ | 0.2 | uAmps |

RATING AND CHARACTERISTICS CURVES (SD101AW)

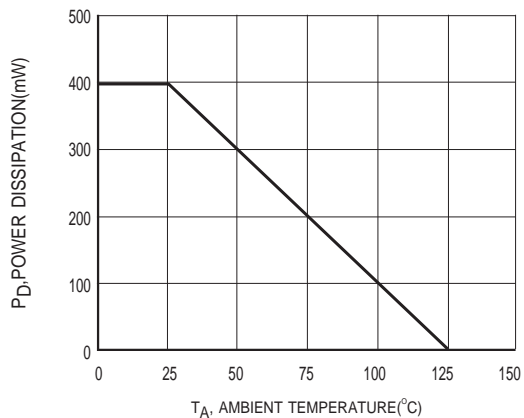


Figure1 Power Derating Curve

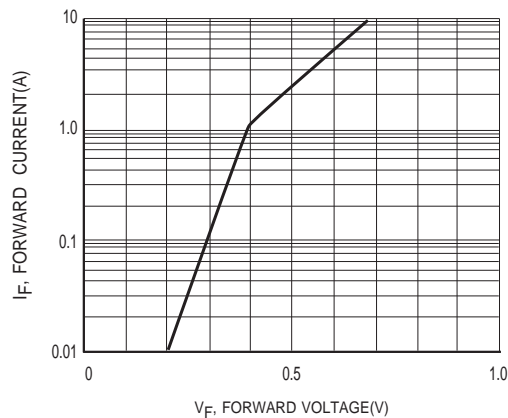


Figure2 Typical Forward Characteristics

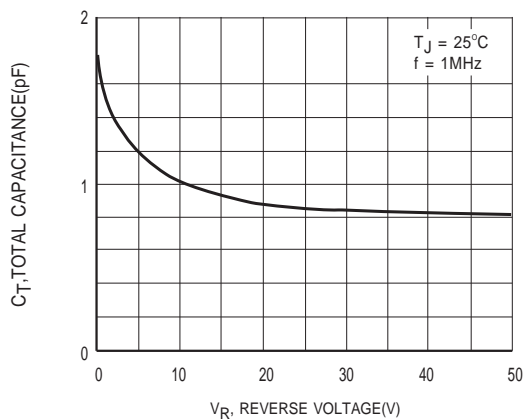


Figure3 Typical Total Capacitance vs Reverse Voltage

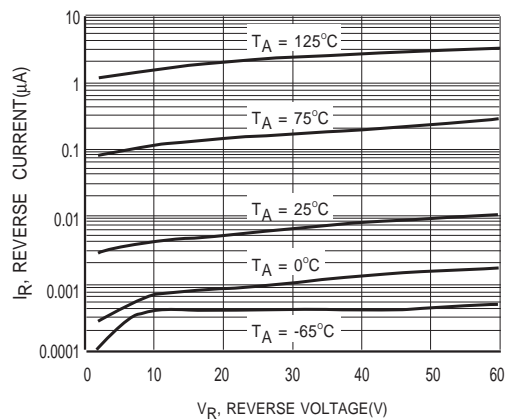


Figure4 Typical Reverse characteristics

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