

SCHOTTKY DIODES

FEATURES

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

MECHANICAL DATA

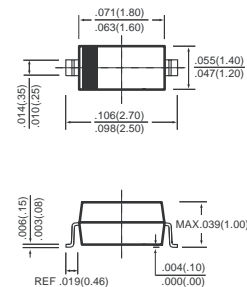
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

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-323



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

| RATINGS | SYMBOL | SD101AWS | UNITS | |
|---|-----------------------------------|--------------|-------|-------|
| Peak Repetitive Peak reverse voltage | V _{RMR} | 60 | Volts | |
| Working Peak Reverse Voltage | V _{RWR} | | | |
| DC Blocking Voltage | V _R | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 42 | Volts | |
| Maximum Forward Continuous Current | I _{FM} | 15 | mAmps | |
| Non-Repetitive Peak Forward Surge Current | I _{FSM} | @t<1.0S | 50 | mAmps |
| | | @t=10μS | 2.0 | Amps |
| Maximum Power Dissipation | P _D | 200 | mW | |
| Thermal Resistance junction to ambient | R _{θJA} | 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 | V(BR)R | 60 | - | - | V |
| Reverse voltage leakage current | I _R | - | - | 0.2 | μA |
| Forward voltage | V _F | - | - | (I _F =1.0mA) | 0.41 |
| | | | | (I _F =15mA) | 1.00 |
| Capacitance between terminals | C _T | - | - | 2.0 | pF |
| Reverse Recovery Time | t _{rr} | - | - | 1.0 | ns |

RATING AND CHARACTERISTICS CURVES (SD101AWS)

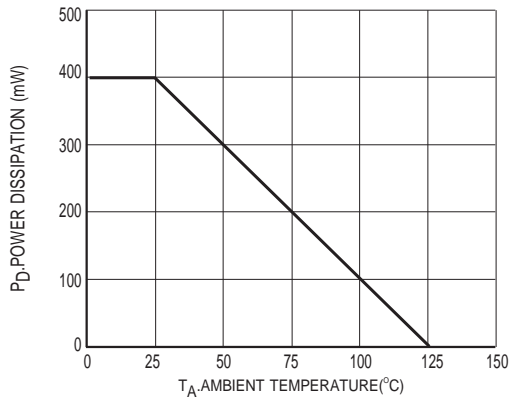


Figure1 Power Derating Curve

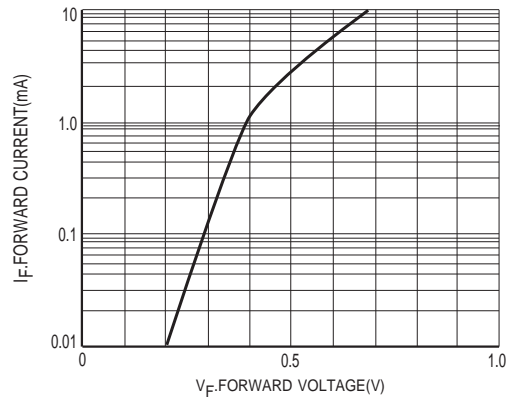


Figure2 Typical Forward Characteristics

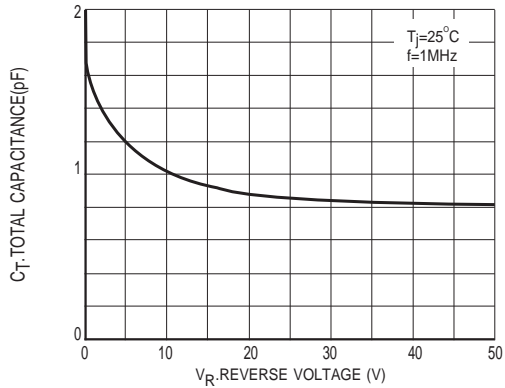


Figure3 Typical Total Capacitance vs Reverse Voltage

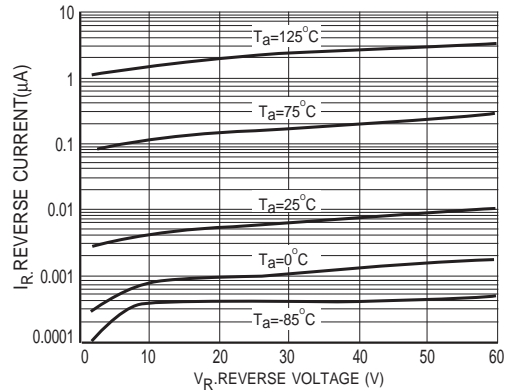


Figure4 Typical Reverse Characteristics

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