

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

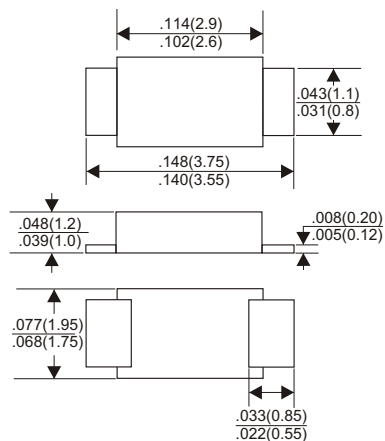
VOLTAGE RANGE

1000 Volts

CURRENT

1.0 Ampere

SOD123FL



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | DSR1M | UNITS |
|---|------------|-------|
| Maximum Recurrent Peak Reverse Voltage | 1000 | V |
| Maximum RMS Voltage | 700 | V |
| Maximum DC Blocking Voltage | 1000 | V |
| Maximum Average Forward Rectified Current at Ta=75°C | 1.0 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 25 | A |
| Maximum Instantaneous Forward Voltage at 1.0A | 1.1 | V |
| Maximum DC Reverse Current Ta=25°C | 5.0 | μA |
| at Rated DC Blocking Voltage Ta=125°C | 100 | μA |
| Typical Junction Capacitance (Note 1) | 15 | pF |
| Typical Thermal Resistance R JA (Note 2) | 80 | °C/W |
| Operating and Storage Temperature Range Tj, Tstg | -65 — +150 | °C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (DSR1M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

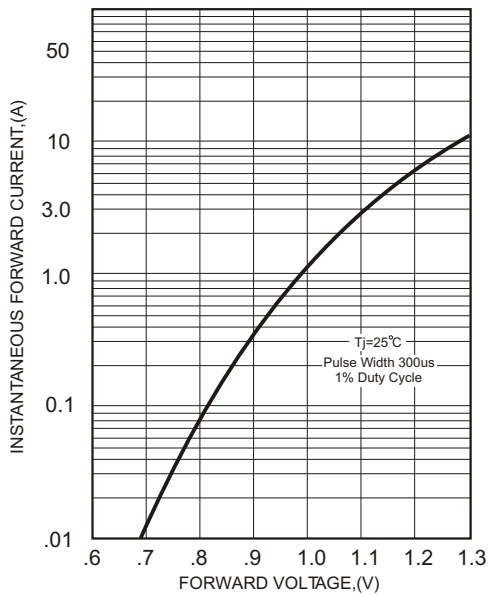


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

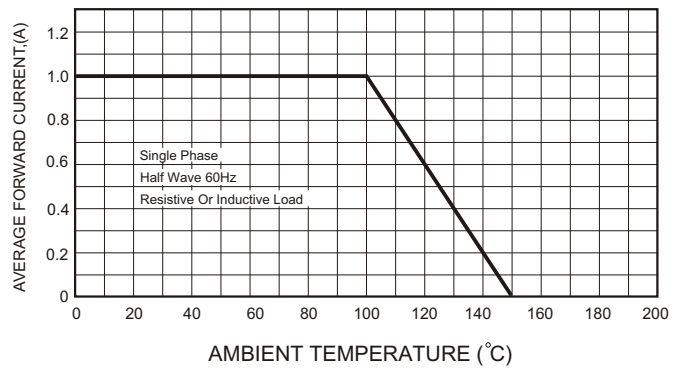


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

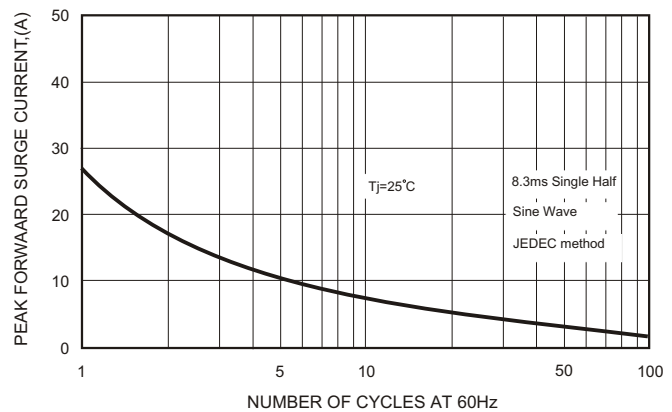


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

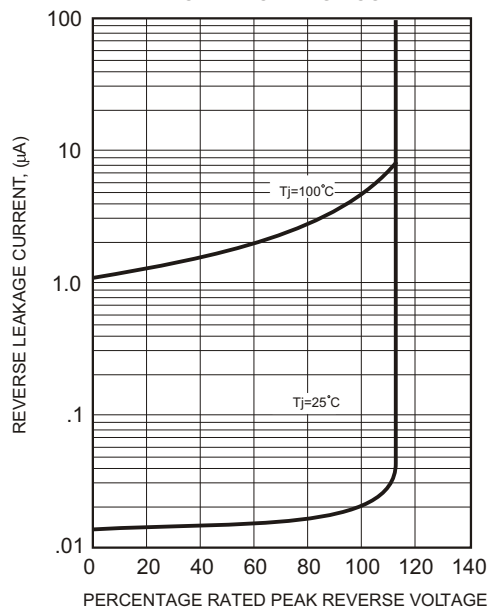


FIG.5-TYPICAL JUNCTION CAPACITANCE

