



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

SS0520
THRU
SS0540

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODES
VOLTAGE RANGE - 20 to 40 Volts **CURRENT - 0.5 Ampere**

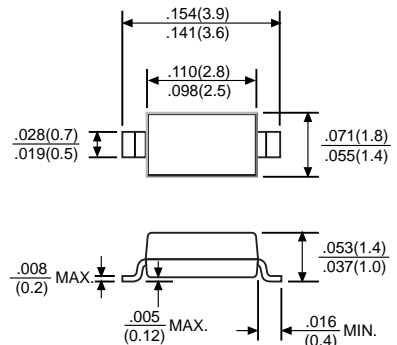
FEATURES

- * For general purpose applications
- * Low turn-on voltage
- * Fast switching time
- * Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD)

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

SOD-123



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | SS0520 | SS0530 | SS0540 | UNITS | |
|---|-----------------------------------|------------------------|--------|--------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | Volts | |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | Volts | |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | Volts | |
| Maximum Average Forward Rectified Current at T _A =25°C | I _O | 0.5 | | | Amps | |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 5.5 | | | Amps | |
| Maximum Instantaneous Forward Voltage | V _F | @ I _F =0.5A | 0.385 | 0.430 | 0.510 | Volts |
| | | @ I _F =0.1A | 0.300 | 0.375 | - | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | 0.25 | 0.13 | 0.02 | mAmps | |
| Typical Thermal Resistance (Note1) | R _{θJA} | 206 | | | °C/W | |
| Typical Junction Capacitance (Note 2) | C _J | 50 | | | pF | |
| Storage Operating Temperature Range | T _J , T _{STG} | -55 to +125 | | | °C | |

Note: 1. Terminals maintained at specified at ambient temperature.
2. Measured at 1 MHz and applied reverse voltage of 0 volts.

RATING AND CHARACTERISTIC CURVES (SS0520 THRU SS0540)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

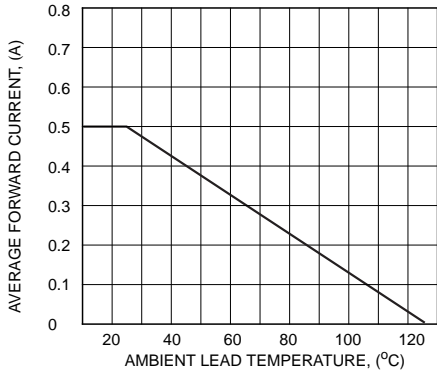


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

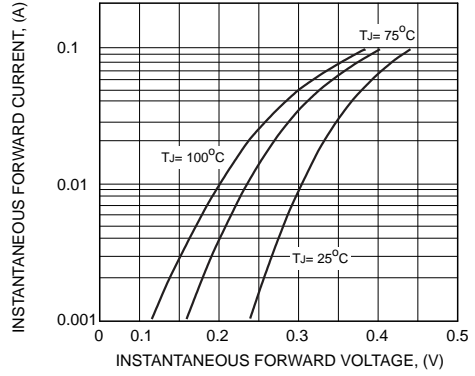


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

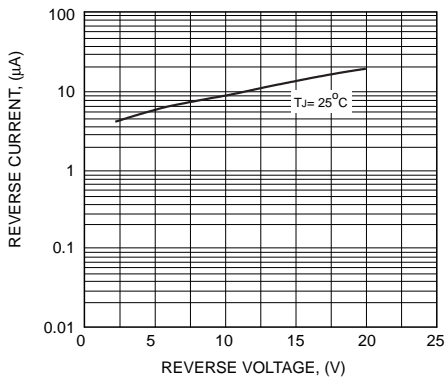


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

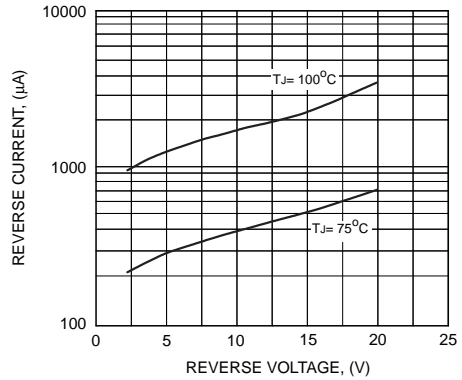


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

