



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

SD103A
THRU
SD103C

TECHNICAL SPECIFICATIONS OF SMALL SIGNAL SCHOTTKY BARRIER DIODES
VOLTAGE RANGE - 20 to 40 Volts **CURRENT - 0.35 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

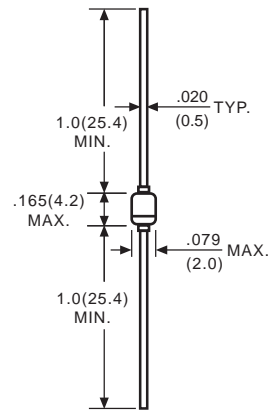
- * Case: Glass sealed case
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.13 gram

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%.



DO-35



Dimensions in inches and (millimeters)

| | SYMBOL | SD103A | SD103B | SD103C | UNITS |
|---|-----------------------------------|---------------------------|---------------------------|---------------------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 40 | 30 | 20 | Volts |
| Maximum RMS Voltage | V _{RMS} | 28 | 21 | 14 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 40 | 30 | 20 | Volts |
| Maximum Average Forward Rectified Current at T _A =25°C | I _O | 0.35 | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 2.0 | | | Amps |
| Maximum Instantaneous Forward Voltage | V _F | 0.6 | | | Volts |
| | | 0.37 | | | |
| Maximum DC Reverse Current | I _R | 5.0 @ V _R =30V | 5.0 @ V _R =20V | 5.0 @ V _R =10V | μAmps |
| Typical Thermal Resistance (Note1) | R _{θJA} | 300 | | | °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. Leads maintained at specified ambient temperature at a distance of 4.0mm from case.

2. Measured at 1 MHz and applied reverse voltage of 0 volts.

RATING AND CHARACTERISTIC CURVES (SD103A THRU SD103C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

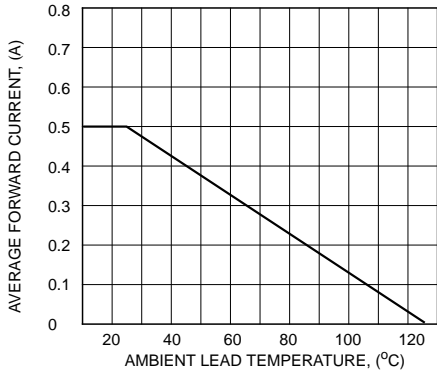


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

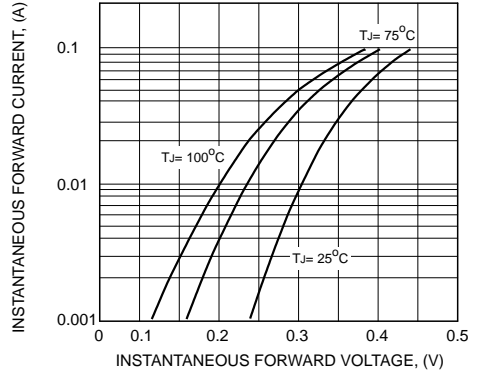


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

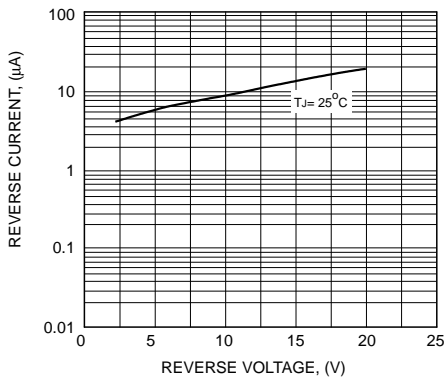


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

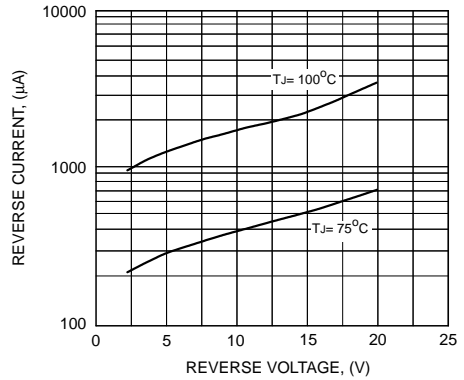


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

