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

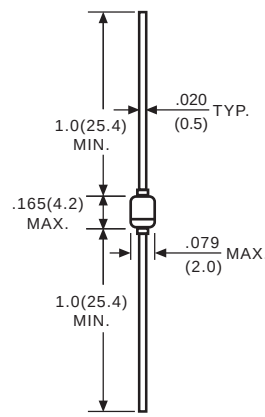
* For general purpose applications
* Low turn-on voltage
* Fast switching time
* Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD)

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



DO-35



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	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	@ I_F=0.2A	V_F	0.6			Volts
	@ I_F=0.02A		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)		$R\theta_{JA}$	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

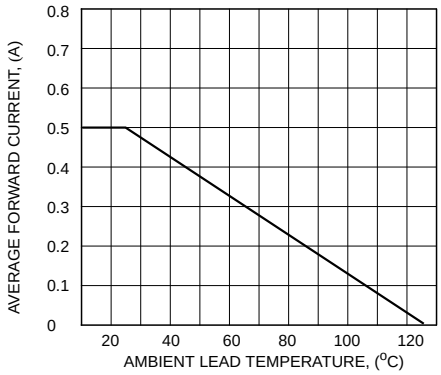


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

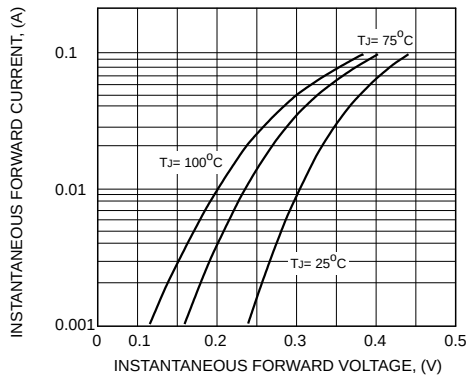


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

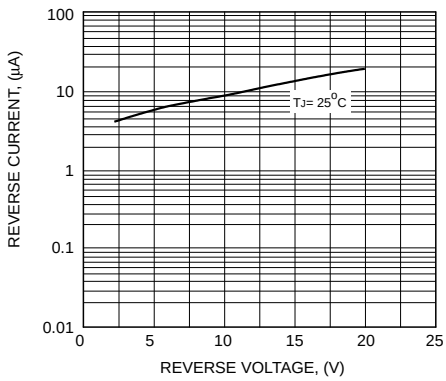


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

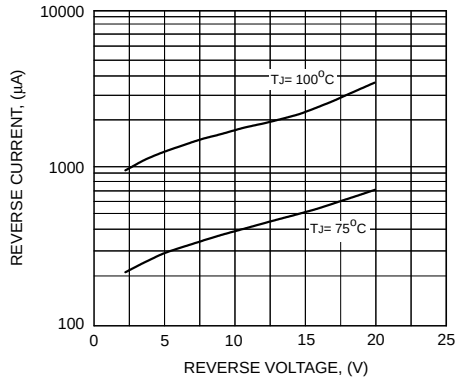


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

