



DC COMPONENTS CO., LTD.  
RECTIFIER SPECIALISTS

SD103AWS  
THRU  
SD103CWS

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODES**  
**VOLTAGE RANGE - 20 to 40 Volts** **CURRENT - 0.35 Ampere**

**FEATURES**

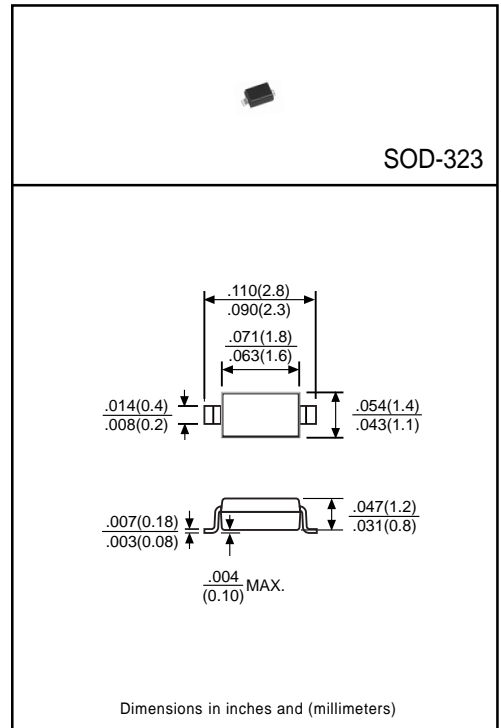
- \* For general purpose applications
- \* Low turn-on voltage
- \* Fast switching time
- \* Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD)

**MECHANICAL DATA**

- \* Case: 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.

**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	SD103AWS	SD103BWS	SD103CWS	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	30	20	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	28	21	14	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	30	20	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> =25°C	I <sub>O</sub>	0.35			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	2.0			Amps
Maximum Instantaneous Forward Voltage	@ I <sub>F</sub> =0.2A	0.6			Volts
	@ I <sub>F</sub> =0.02A	0.37			
Maximum DC Reverse Current	I <sub>R</sub>	5.0 @ V <sub>R</sub> =30V	5.0 @ V <sub>R</sub> =20V	5.0 @ V <sub>R</sub> =10V	μAmps
Typical Thermal Resistance (Note1)	R <sub>θJA</sub>	300			°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	50			pF
Storage Operating Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 125			°C

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

# RATING AND CHARACTERISTIC CURVES (SD103AWS THRU SD103CWS)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

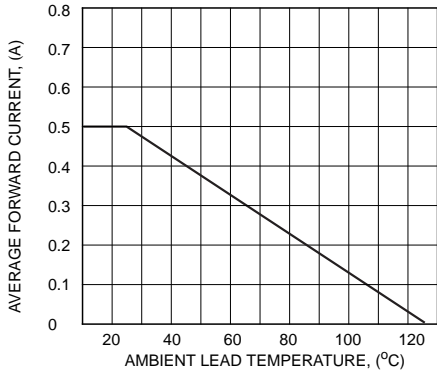


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

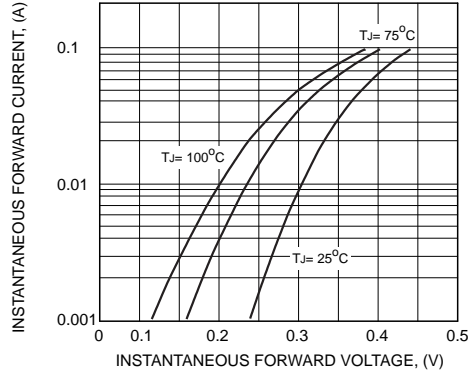


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

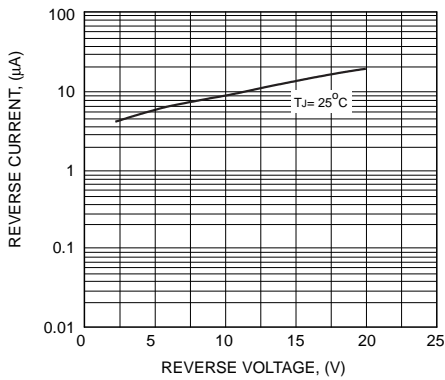


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

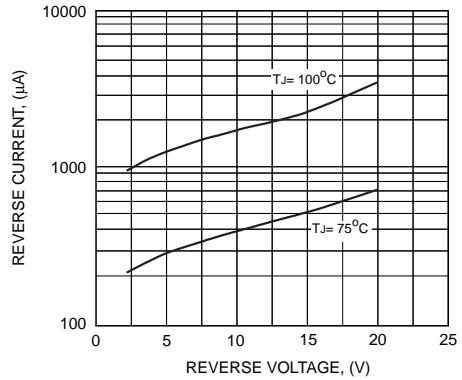


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

