

# SD103AWS~SD103CWS

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 20 to 40 Volt    **CURRENT** 0.35 Ampere

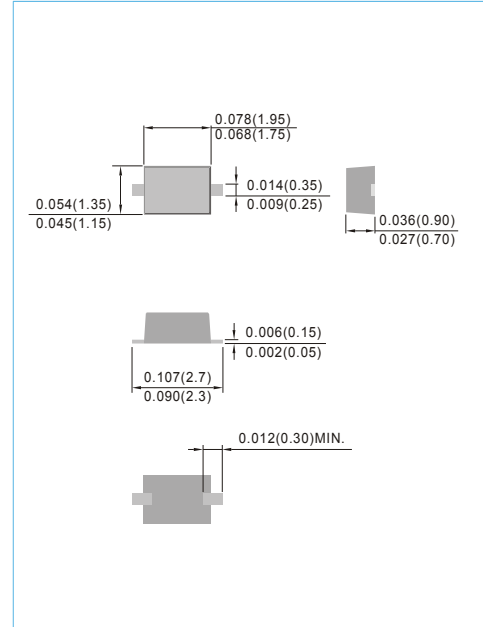
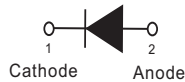
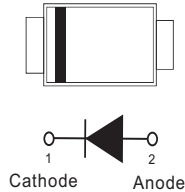
**SOD-323**    Unit : inch(mm)

### FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00014 ounces, 0.0041 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

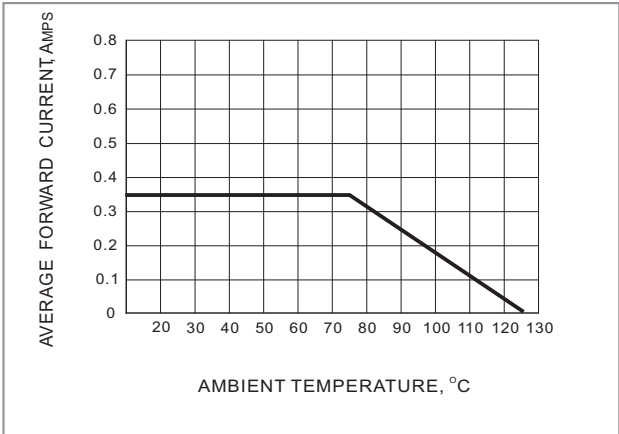
Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Units
Marking Code	-	S6	S7	S8	-
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	30	20	V
Maximum RMS Voltage	$V_{RMS}$	28	21	14	V
Maximum DC Blocking Voltage	$V_{DC}$	40	30	20	V
Maximum Average Forward Current at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.35			A
Peak Forward Surge Current at 10 $\mu\text{s}$	$I_{FSM}$	2			A
Maximum Instantaneous Forward Voltage	$V_F$	0.37@0.02A 0.6@0.2A			V
Maximum Reverse Current	$I_R$	5@30V	5@20V	5@10V	$\mu\text{A}$
Typical Junction Capacitance at $V_R=0\text{V}$	$C_J$	50			pF
Maximum Thermal Resistance (Note 1)	$R_{\theta JA}$	650			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J$	-55 to +125			$^\circ\text{C}$

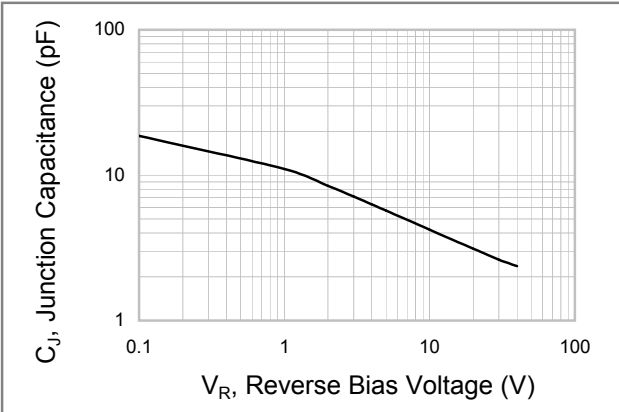
NOTES : 1.Mounted on an FR4 PCB, single-sided copper, mini pad.

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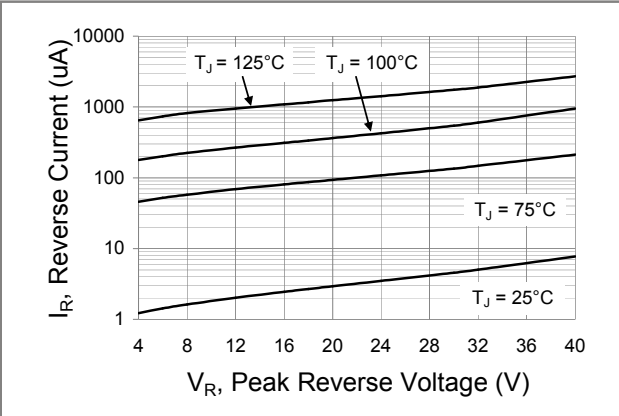
## RATING AND CHARACTERISTIC CURVES



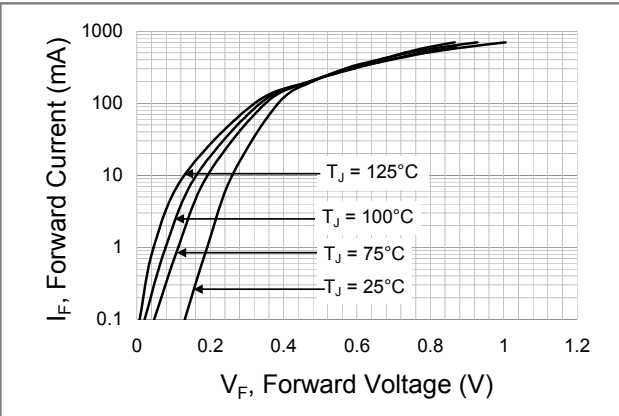
**Fig.1 FORWARD CURRENT DERATING CURVE**



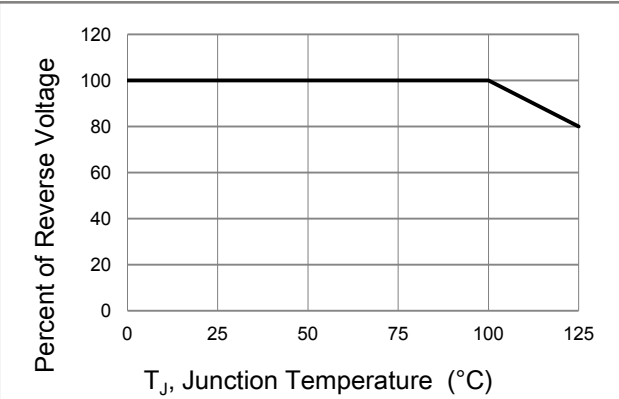
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



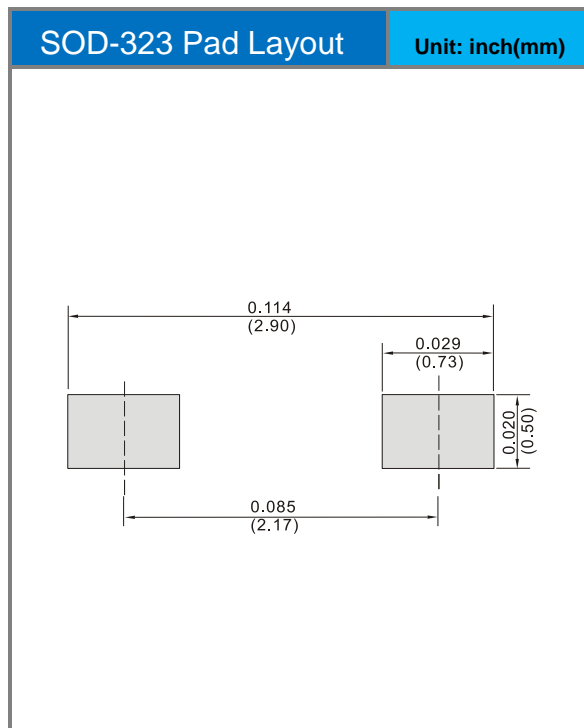
**Fig.5 Operating Temperature Derating Curve**

## SD103AWS~SD103CWS

### Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SD103AWS	SOD-323	5K pcs / 7" reel	S6
SD103AWS	SOD-323	12K pcs / 13" reel	S6
SD103BWS	SOD-323	5K pcs / 7" reel	S7
SD103BWS	SOD-323	12K pcs / 13" reel	S7
SD103CWS	SOD-323	5K pcs / 7" reel	S8
SD103CWS	SOD-323	12K pcs / 13" reel	S8

### Mounting Pad Layout



## SD103AWS~SD103CWS

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