



SD103AWS~SD103CWS

SURFACE MOUNT SCHOTTKY BARRIER

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

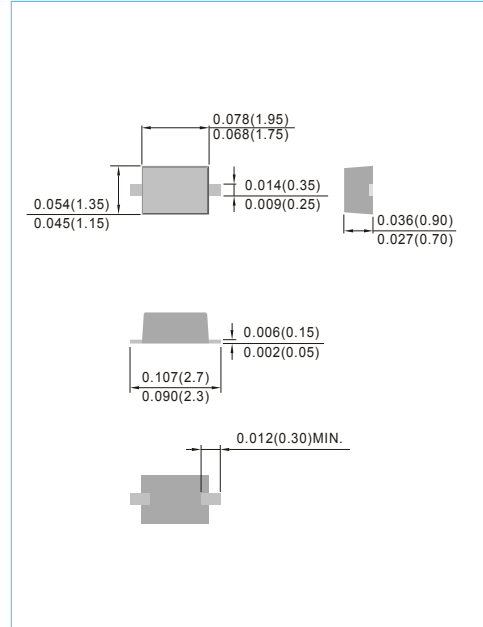
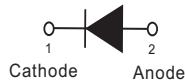
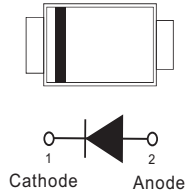
SOD-323 Unit : inch(mm)

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 μs	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	μA
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

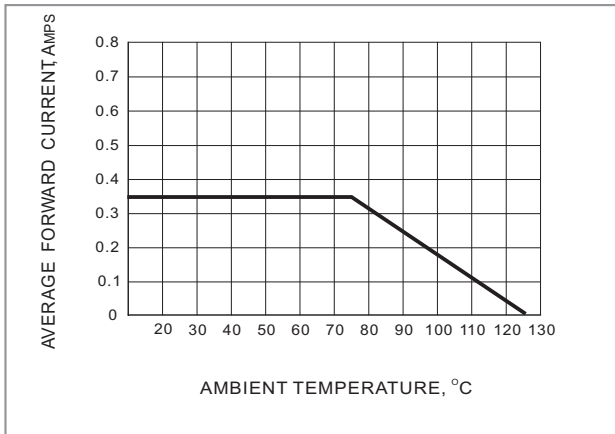


Fig.1 FORWARD CURRENT DERATING CURVE

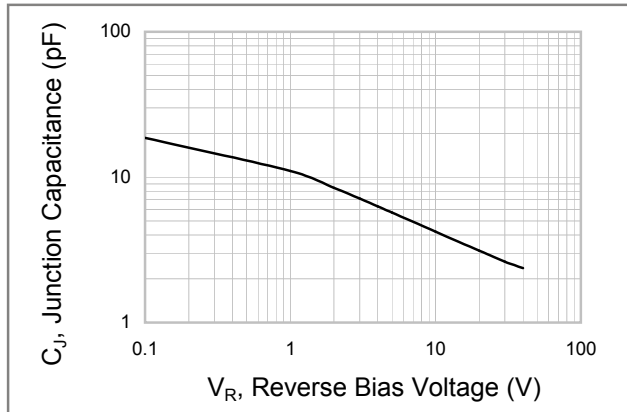


Fig.2 Typical Junction Capacitance

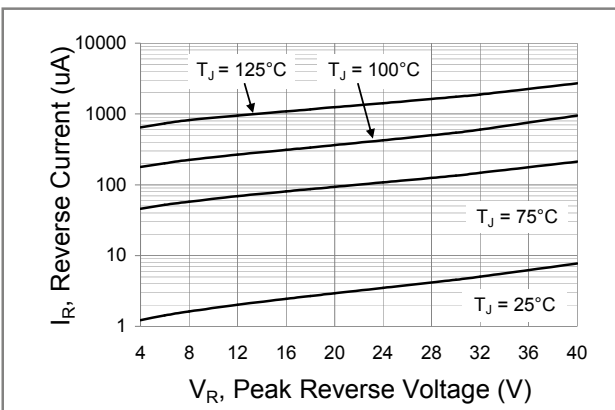


Fig.3 Typical Reverse Characteristics

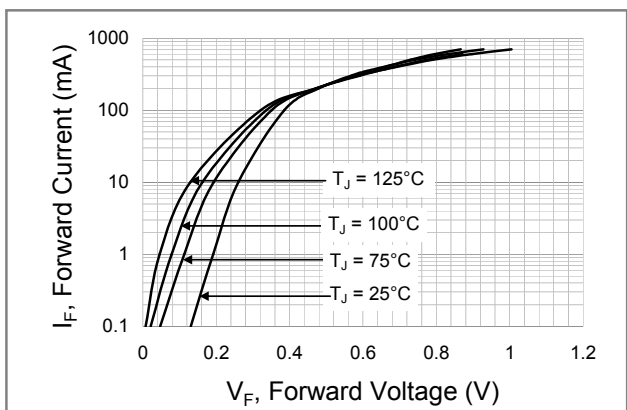


Fig.4 Typical Forward Characteristics

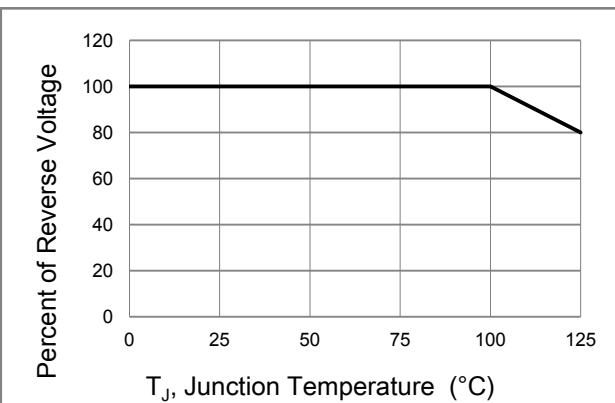
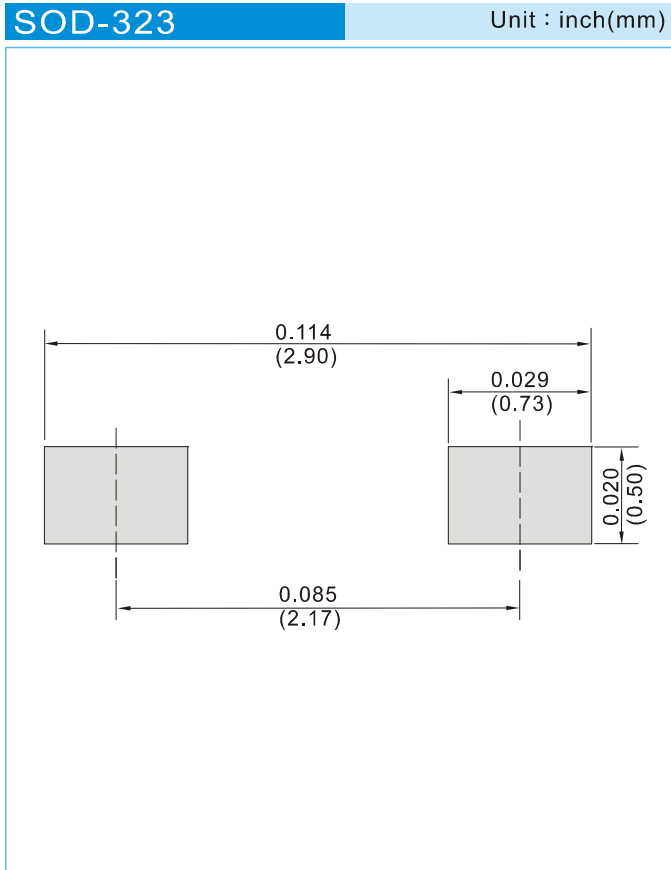


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 12K per 13" plastic Reel
T/R - 5K per 7" plastic Reel



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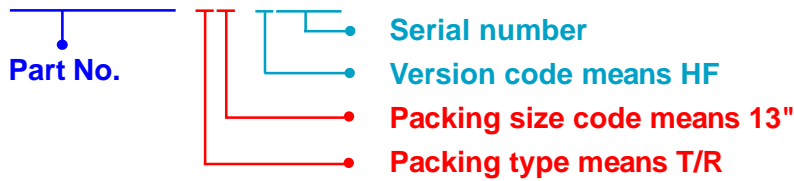
Part No_packing code_Version

SD103AWS_R1_00001

SD103AWS_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			