



DATA SHEET

SEMICONDUCTOR

SD103AWS/BWS/CWS

SCHOTTKY DIODES

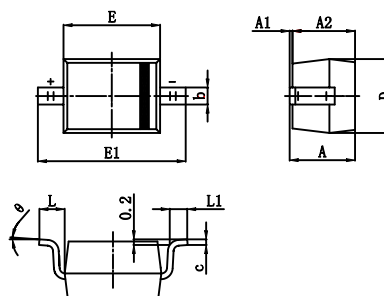


SOD323 Unit:inch(mm)

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MARKING : SD103AWS: JV
SD103BWS: JW
SD103CWS: JJ



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Maximum Ratings and Electrical Characteristics, Single Diode @TA=25

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

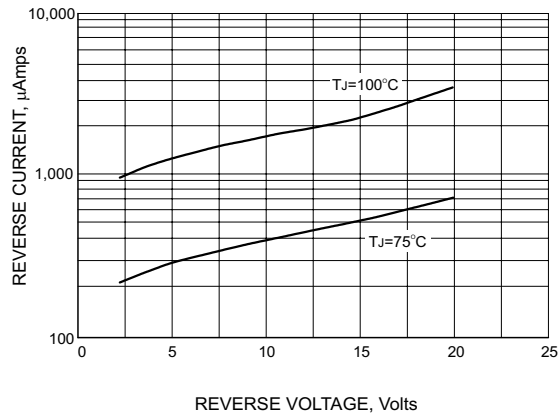
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak reverse voltage	VRRM				V
Working Peak	VRWM	40	30	20	V
DC Blocking Voltage	VR				V
RMS Reverse Voltage	VR(RMS)	28	21	14	V
Forward Continuous Current	IFM	350			mA
Repetitive Peak Forward Current @t≤1.0s	IFRM	1.5			A
Power Dissipation	Pd	200			mW
Thermal Resistance Junction to Ambient	RθJA	300			/ W
Storage temperature	TSTG	-55~+150			°C

Electrical Ratings @TA=25

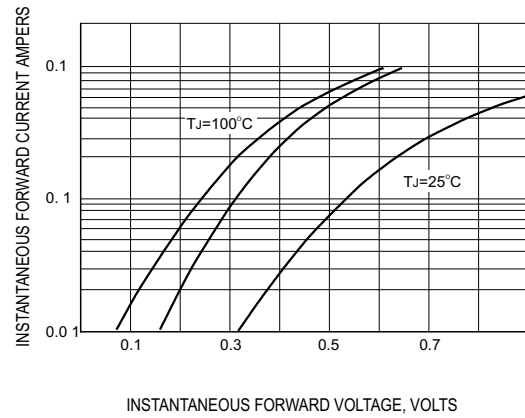
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V (BR)R	40			V	IR=10μA
SD103AWS		30				IR=10μA
SD103BWS		20				IR=10μA
SD103CWS						
Forward voltage	VF		0.37 0.67	0.4 1.0	V	IF=20mA IF=200mA
Reverse current	IRM			5.0	μA	VR=30V VR=20V VR=10V
SD103AWS						
SD103BWS						
SD103CWS						
Capacitance between terminals	CT		50		pF	VR=0V, f=1.0MHz
Reverse Recovery Time	trr		10		ns	IF=IR=200mA Irr=0.1XIR, RL=100Ω

DEVICE CHARACTERISTICS

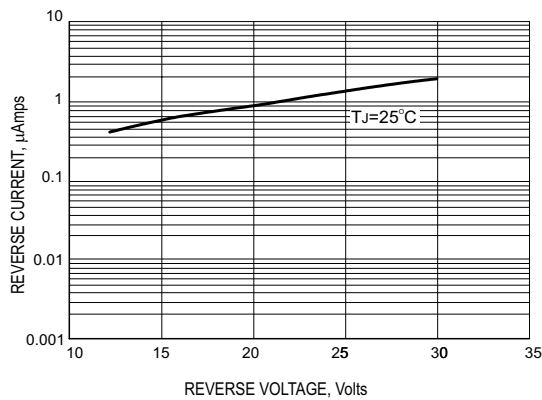
SD103AWS/BWS/CWS



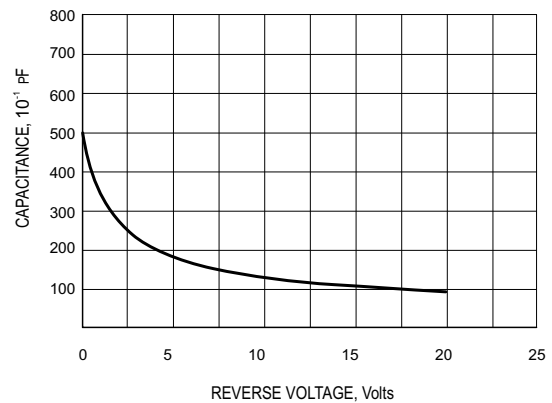
TYPICAL REVERSE CURRENT



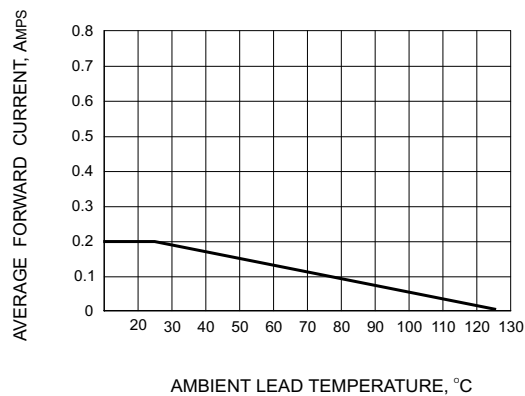
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING