

## SOD-323 Plastic-Encapsulate Schottky Barrier Diode

### FEATURES

- \* High Current Capability
- \* Low Forward Voltage Drop

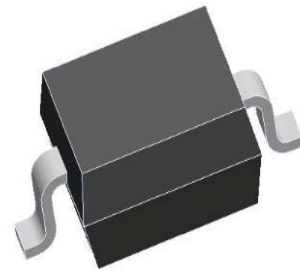
### MECHANICAL DATA

- \* SOD-323 Small Outline Plastic Package
- \* Polarity: Color band denotes cathode end
- \* Mounting Position: Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

**Marking: SD103AWS: S4  
SD103BWS: S5  
SD103CWS: S6**



**SOD-323**

### Maximum Ratings & Thermal Characteristics (Ratings at 25 °C ambient temperature unless otherwise specified.)

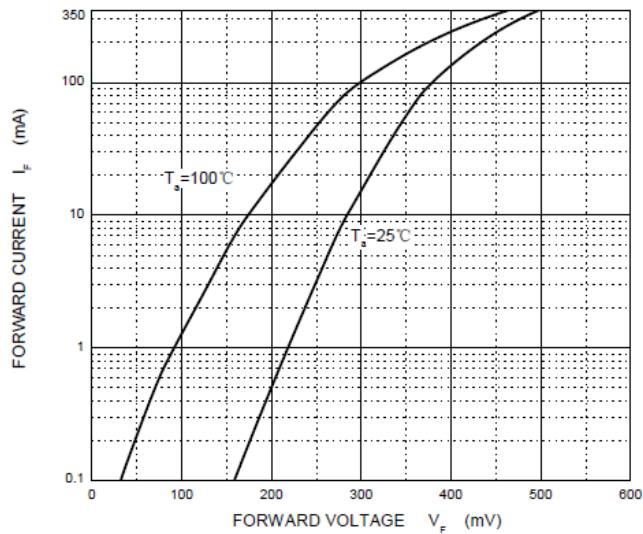
Parameters	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Maximum repetitive peak reverse voltage	VRRM	40	30	20	V
Maximum RMS voltage	VRMS	28	21	14	V
Maximum DC blocking voltage	VDC	40	30	20	V
Maximum average forward rectified current	IFM	350			mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	1.5			A
Power Dissipation	PD	200			mW
Typical thermal resistance	RθJA	500			°C/W
Operating junction temperature	Tj	125			°C
Storage temperature range	TSTG	-50			°C

### Electrical Characteristics (Ratings at 25 °C ambient temperature unless otherwise specified.)

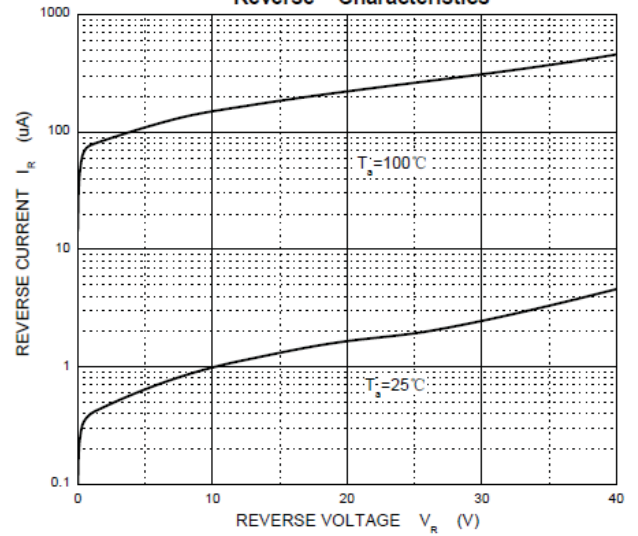
Parameters	Symbol	Test conditions	SD103AWS	SD103BWS	SD103CWS	Unit
Maximum forward voltage	VF	IF = 20mA IF = 200mA	0.370 0.600			V
Maximum reverse breakdown voltage	VR	IR=100uA	40	30	20	V
Maximum reverse current	IR	VR=30V SD103AWS VR=20V SD103BWS VR=10V SD103CWS	5.0			uA
Type junction capacitance	Cj	VR =0V, f = 1MHz	50			pF
Reverse recovery time	Trr	IF=IR=200mA, Irr=0.1xIR,RL=100 Ω	10			ns

## RATING AND CHARACTERISTICS CURVES (SD103AWS THRU SD103CWS)

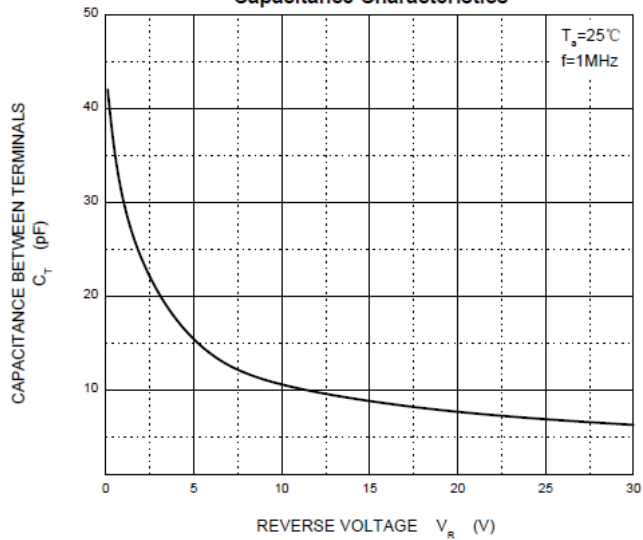
Forward Characteristics



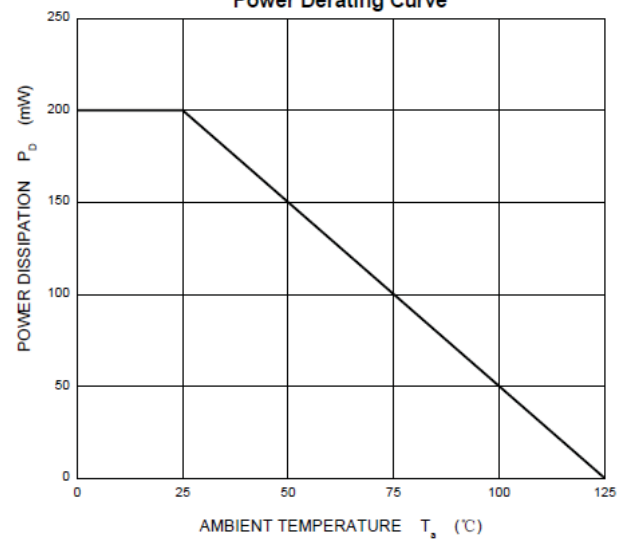
Reverse Characteristics



Capacitance Characteristics



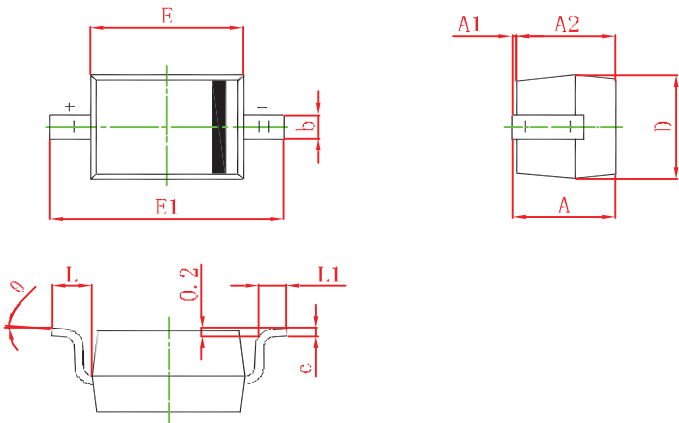
Power Derating Curve



SOD-323 PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-323	-T	3,000	15,000	---	---	178	390*205*31	120,000	5.17

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