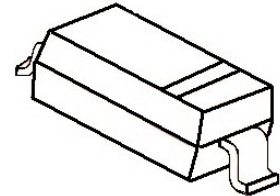


**SOD-123 Plastic-Encapsulate Schottky Barrier Diode**
**Features**

- High Current Capability
- Low Forward Voltage Drop

**Mechanical Data**

- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

**SOD-123**


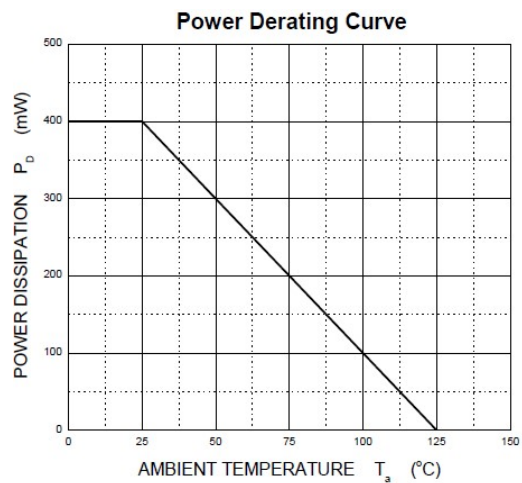
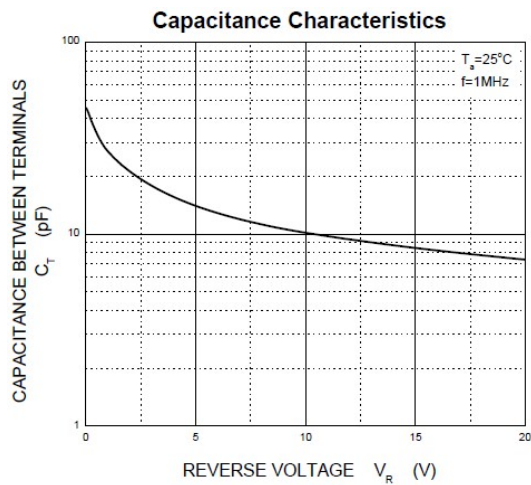
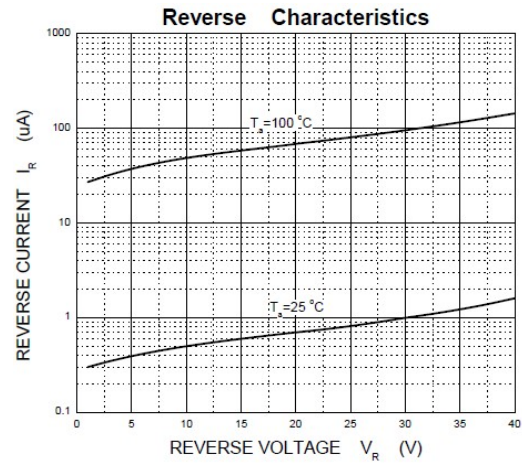
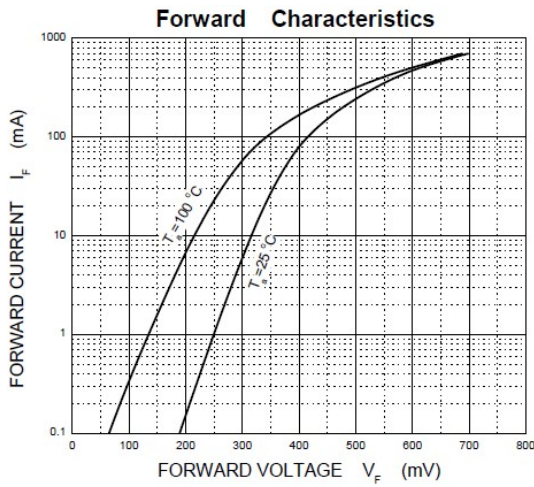
**Marking: SD103AW: S4**  
**SD103BW: S5**  
**SD103CW: S6**

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

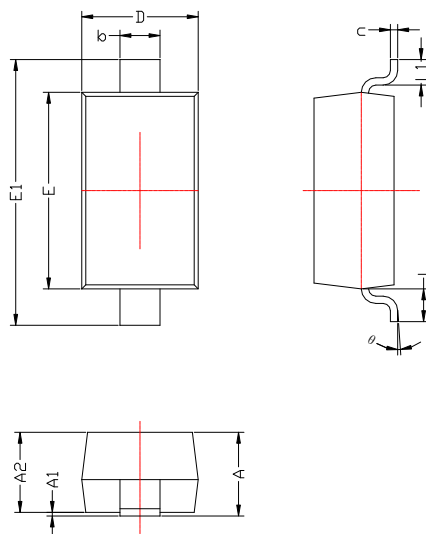
Parameters	Symbol	SD103AW	SD103BW	SD103CW	Unit
Maximum repetitive peak reverse voltage	VRRM	40	30	20	V
Maximum RMS voltage	VRMS	28	21	14	V
Maximum DC blocking voltage	VDC	40	30	20	V
Maximum average forward rectified current	IFM	350			mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	2			A
Power Dissipation	PD	400			mW
Typical thermal resistance	RθJA	250			°C/W
Operating junction temperature	Tj	125			°C
Storage temperature range	TSTG	-50-+150			°C

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

Parameters	Symbol	Test conditions	SD103AW	SD103BW	SD103CW	Unit
Maximum forward voltage	V <sub>F</sub>	IF = 20mA IF = 200mA	0.370 0.600			V
Maximum reverse breakdown voltage	V <sub>R</sub>	IR=100uA	40	30	20	V
Maximum reverse current	I <sub>R</sub>	VR=30V <b>SD103AW</b> VR=20V <b>SD103BW</b> VR=10V <b>SD103CW</b>	5.0			uA
Type junction capacitance	C <sub>j</sub>	VR =0V, f = 1MHz	50			pF
Reverse recovery time	T <sub>rr</sub>	IF=IR=200mA, I <sub>rr</sub> =0.1xI <sub>R</sub> ,RL=100 Ω	10			ns

**Characteristic Curves**

**SOD-123 PACKAGE OUTLINE**

Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
$\theta$	0°	8°

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