

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



Marking: SOD-123
SD103AW: S4
SD103BW: S5
SD103CW: S6

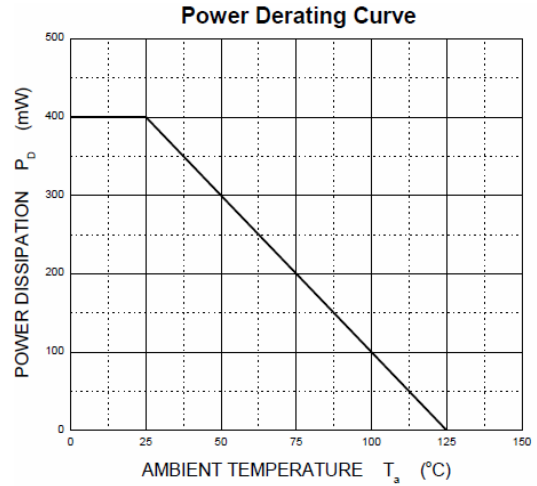
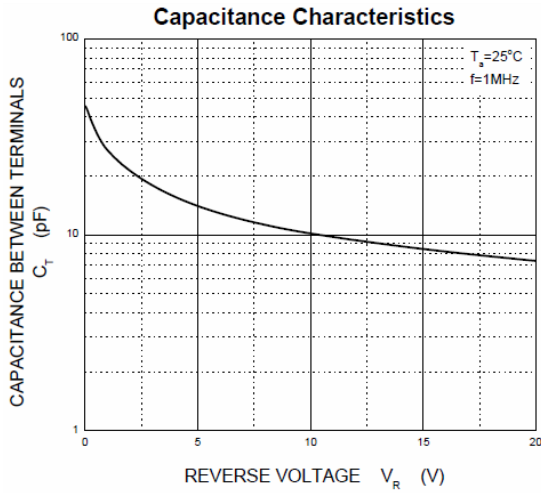
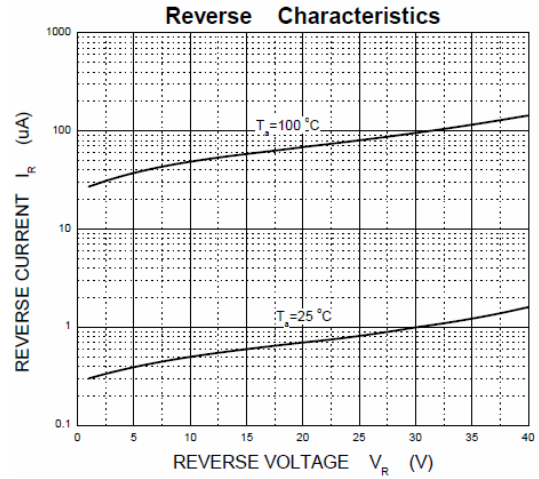
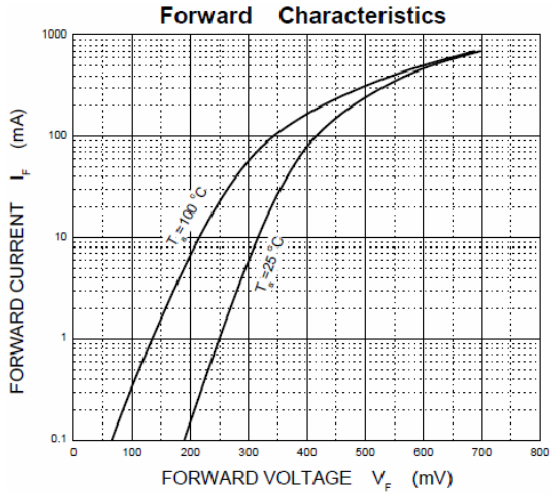
Maximum Ratings & Thermal Characteristics (T _A =25°C unless otherwise noted)					
Parameters	Symbol	Value			Unit
		SD103AW	SD103BW	SD103CW	
Maximum repetitive peak reverse voltage	V _{RRM}	40	30	20	V
Maximum RMS voltage	V _{RMS}	28	21	14	V
Maximum DC blocking voltage	V _{DC}	40	30	20	V
Non-repetitive Peak Forward Current	I _{FM}	350			mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	2			A
Power dissipation	P _D	400			mW
typical thermal resistance	R _{θJA}	250			°C/W
Operating junction temperature	T _j	125			°C
Storage temperature range	T _{STG}	-50-+150			°C

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (T _A =25°C unless otherwise noted)					
Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Maximum reverse breakdown voltage	VR	IR=100uA SD103AW SD103BW SD103CW	40 30 20		V
Maximum reverse current	IR	VR=30V SD103AW VR=20V SD103BW VR=10V SD103CW		5.0	uA
Maximum forward voltage	VF	IF=20mA IF=200mA		0.37 0.60	V
Reverse recovery time	TRR	IF = IR= 200mA Irr=0.1xIR RL=100 Ω		10	nS
Type junction capacitance	CJ	VR=0V, f=1MHZ		50	pF

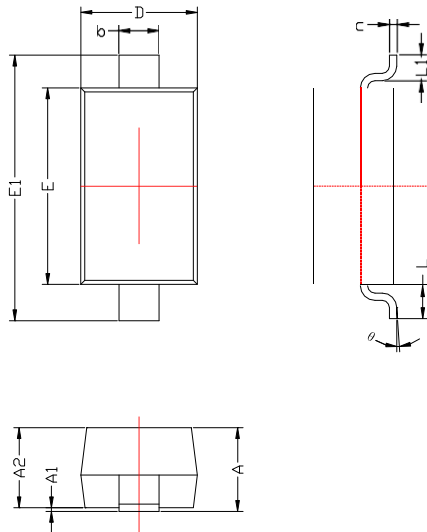
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

millimeters



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
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2017.03.31	First issue

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