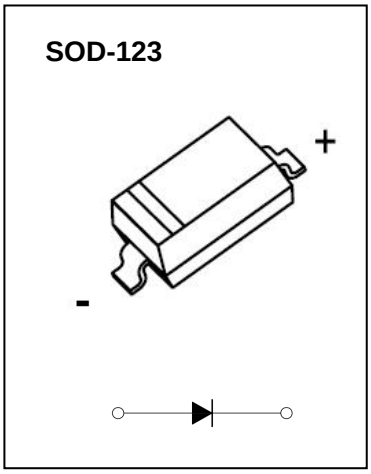
Schottky Barrier Diode



FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

MARKING:

SD103AW:S4	SD103BW:S5	SD103CW:S6
S4 / S4	S5 / S5	S6 / S6

The marking bar indicates the cathode
Solid dot = Green molding compound device,if none, the normal device.

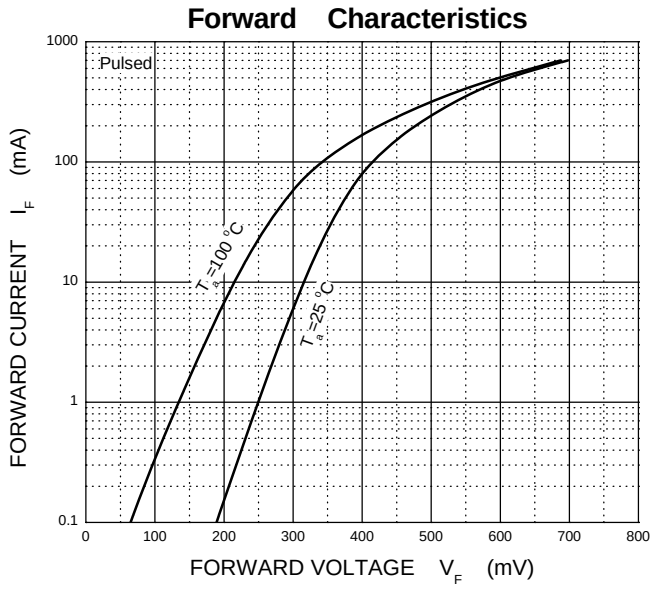
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

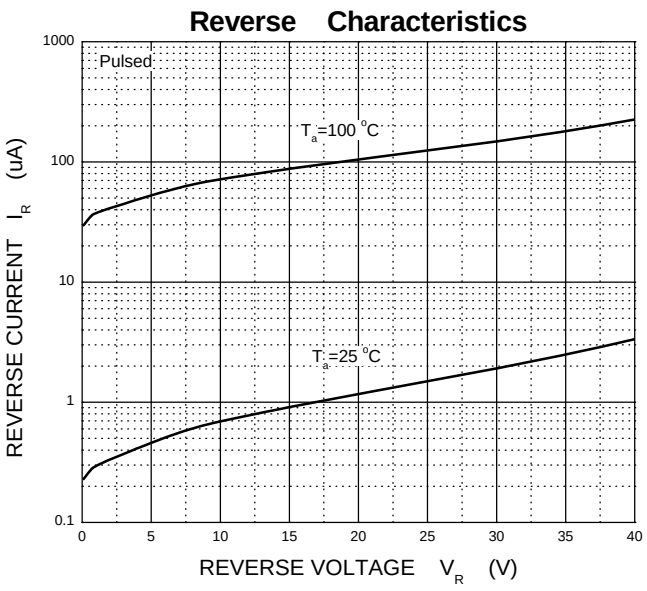
Symbol	Parameter	Value			Unit
		SD103AW	SD103BW	SD103CW	
V_{RRM}	Peak Repetitive Reverse Voltage	40	30	20	V
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_{FM}	Forward Continuous Current	350			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2			A
P_D	Power Dissipation	400			mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	250			℃/W
T_j	Junction Temperature	125			℃
T_{stg}	Storage Temperature	-55~+150			℃

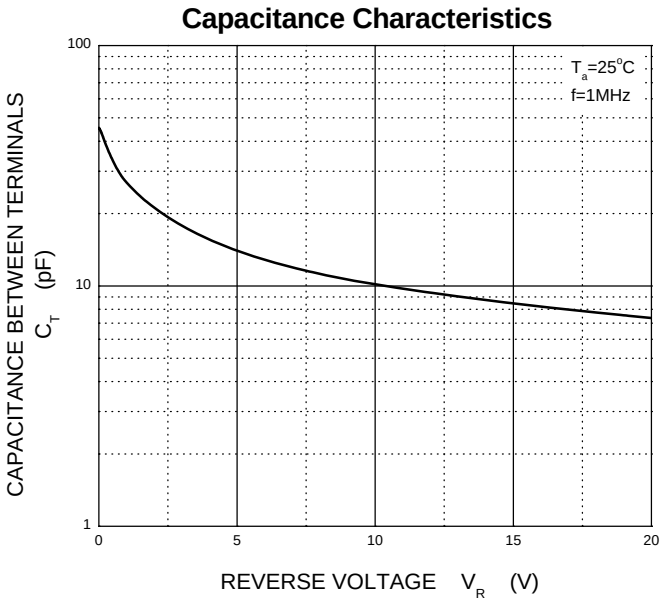
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

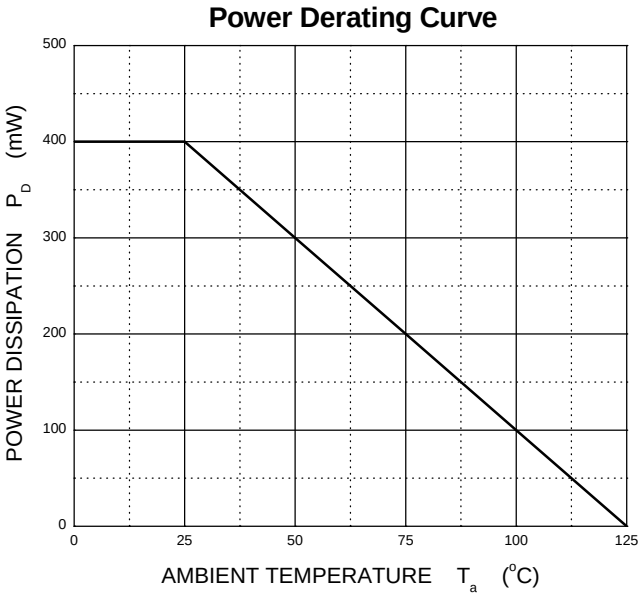
Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	SD103AW	40			V
			SD103BW	30			
			SD103CW	20			
Reverse current	I_R	V_R=30V	SD103AW			5	μA
		V_R=20V	SD103BW				
		V_R=10V	SD103CW				
Forward voltage	V_F	I_F=20mA				0.37	V
		I_F=200mA				0.6	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			50		pF
Reverse recovery time	t_{rr}	I_F= I_R=200mA, I_{rr}=0.1×I_R, R_L=100Ω			10		ns

Typical Characteristics

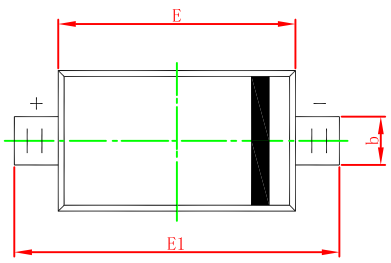


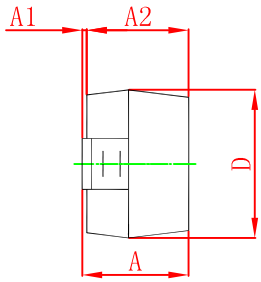


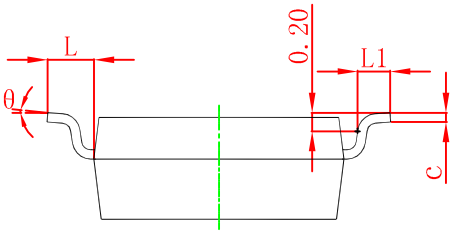




SOD-123 Package Outline Dimensions

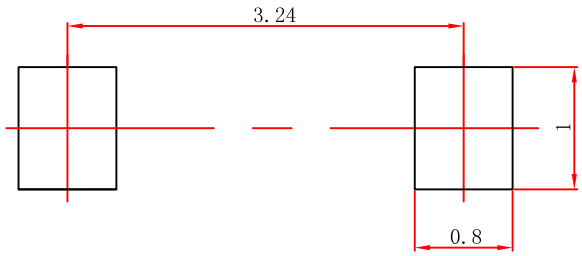






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.