

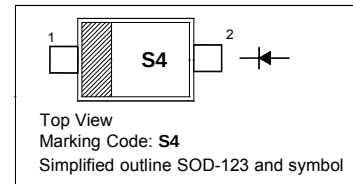
Surface Mount Schottky Barrier Diodes

Features

- Low Forward Voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage SD103AW SD103BW SD103CW	V_{RRM}	40 30 20	V
Reverse Voltage SD103AW SD103BW SD103CW	V_R	40 30 20	V
Average Forward Rectified Current	$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$	I_{FSM}	2	A
Power Dissipation	P_{tot}	400	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 125	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$ SD103AW SD103BW SD103CW	$V_{(BR)R}$	40 30 20	- - -	- - -	V
Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$ SD103AW SD103BW SD103CW	I_R	- - -	- - -	5 5 5	μA
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	- -	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	10	-	ns



CHINA BASE
INTERNATIONAL

SOD-123



SD103AW-SD103CW

www.china-base.com.hk

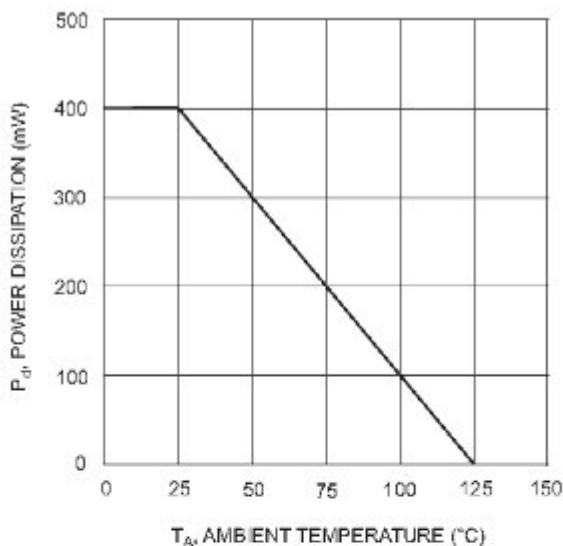


Fig. 1 Power Derating Curve

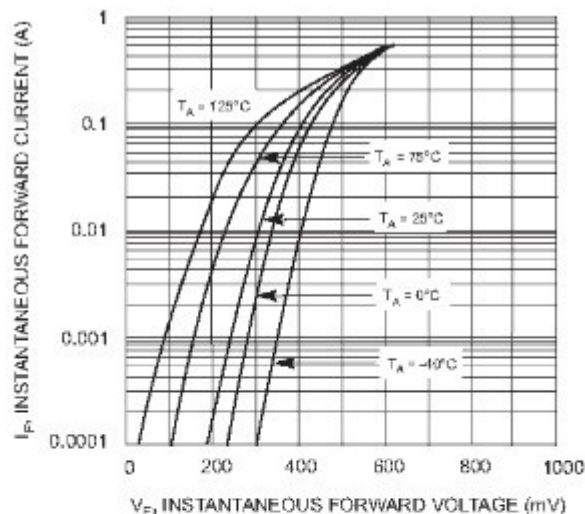


Fig. 2 Typical Forward Characteristics

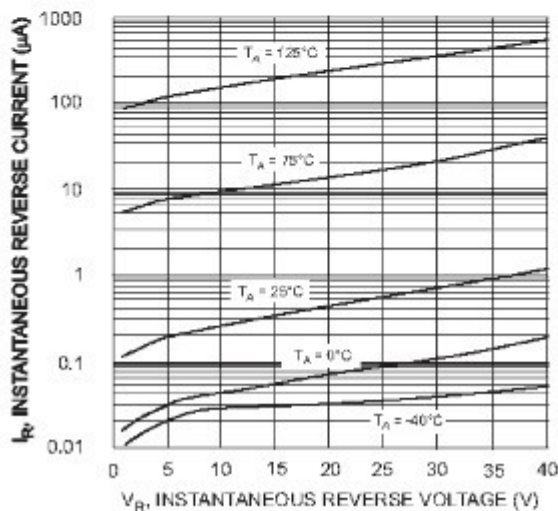


Fig. 3 Typical Reverse Characteristics

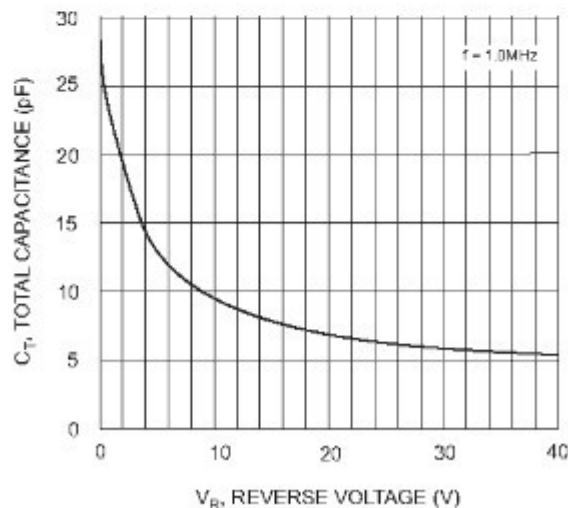
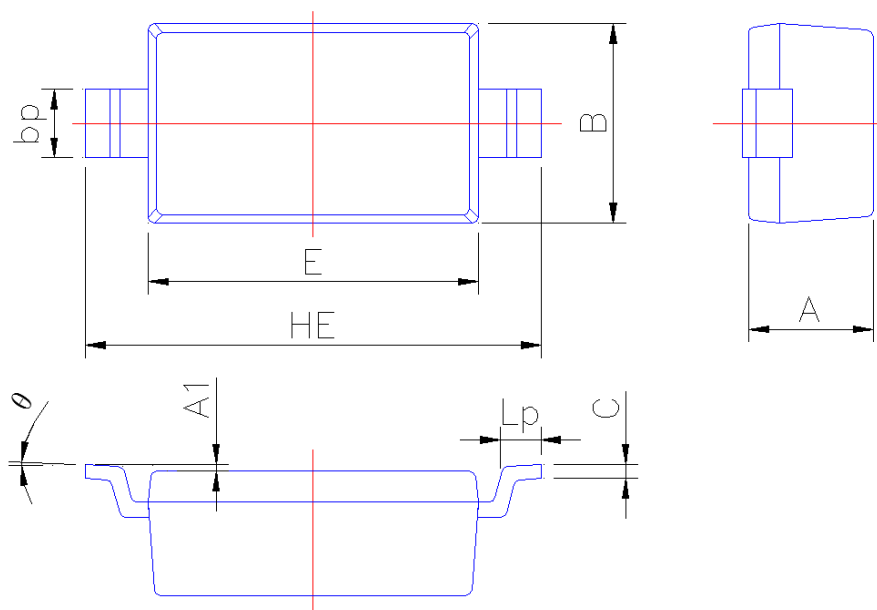


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.01	0.100
B	1.55	1.65
bp	0.50	0.70
C	0.09	0.150
E	2.60	2.70
HE	3.45	3.85
Lp	0.20	0.45
θ	0°	5°