

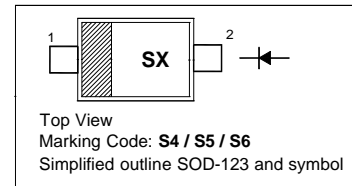
## Surface Mount Schottky Barrier Diodes

### Features

- Low Forward Voltage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

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

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	$\mu\text{A}$
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

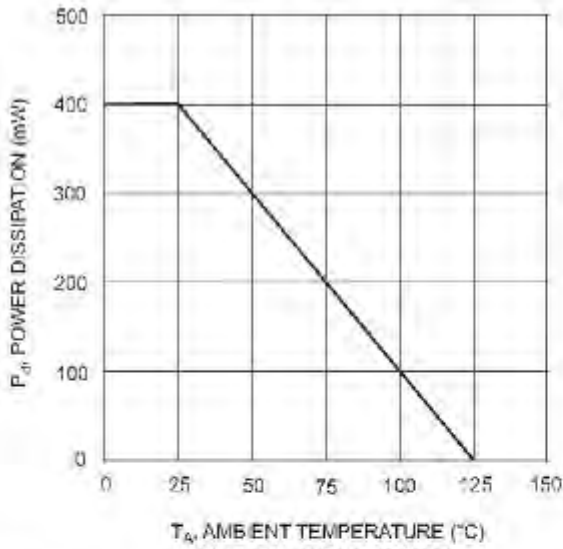


Fig. 1 Power Derating Curve

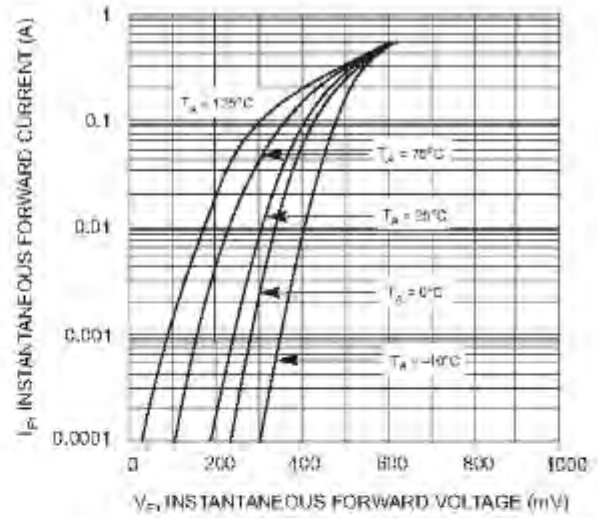


Fig. 2 Typical Forward Characteristics

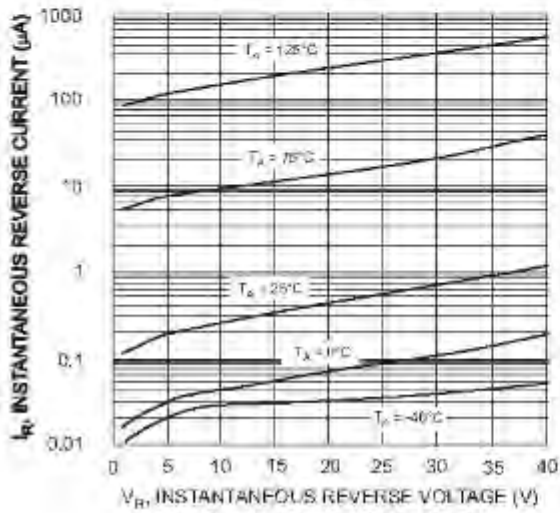


Fig. 3 Typical Reverse Characteristics

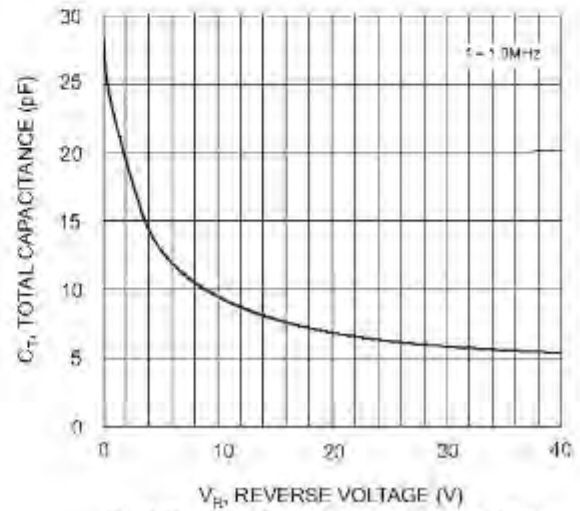
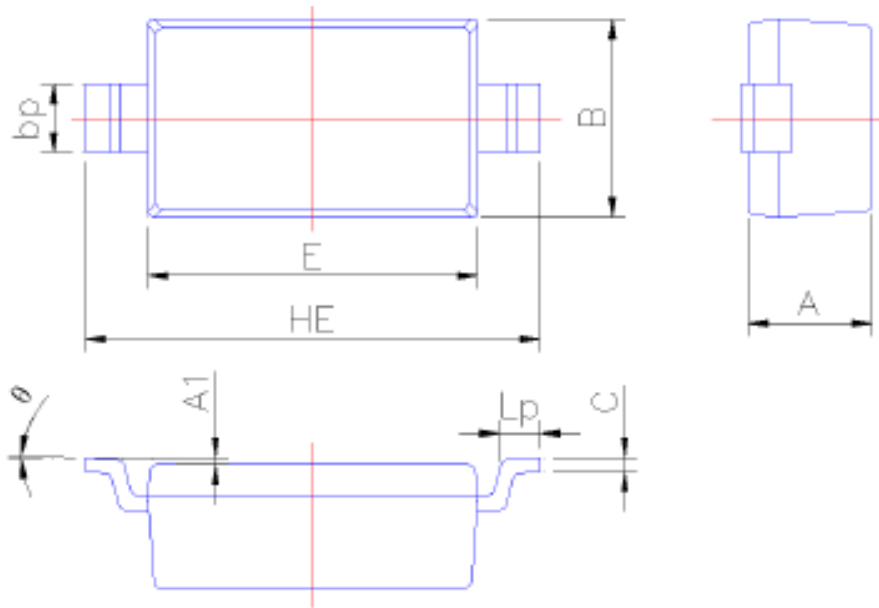


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

## 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
$\theta$	0°	5°