

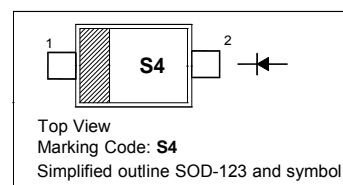
### Surface Mount Schottky Barrier Diodes

#### 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	$V_{RRM}$	SD103AW SD103BW SD103CW	40 30 20	V
Reverse Voltage		SD103AW SD103BW SD103CW	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 $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	SD103AW SD103BW SD103CW	40 30 20	- - -	V	
Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$		$I_R$	SD103AW SD103BW SD103CW	- - -	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
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_T$			-	50	-
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	



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**SOD-123**



**SD103AW-SD103CW**

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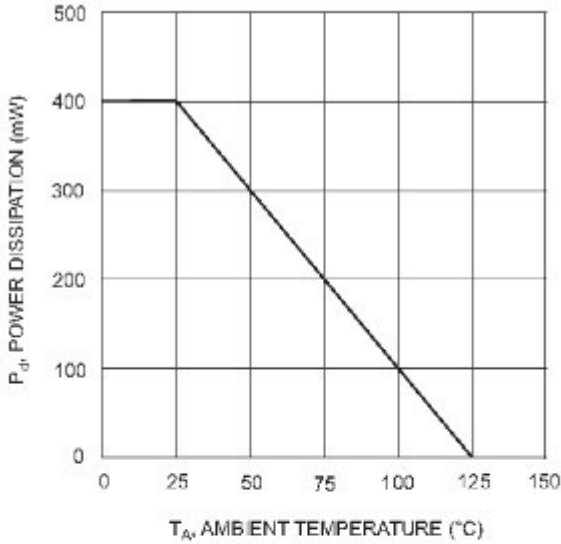


Fig. 1 Power Derating Curve

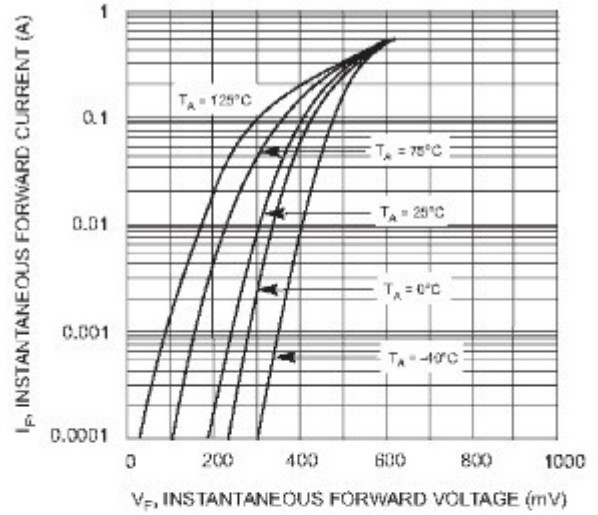


Fig. 2 Typical Forward Characteristics

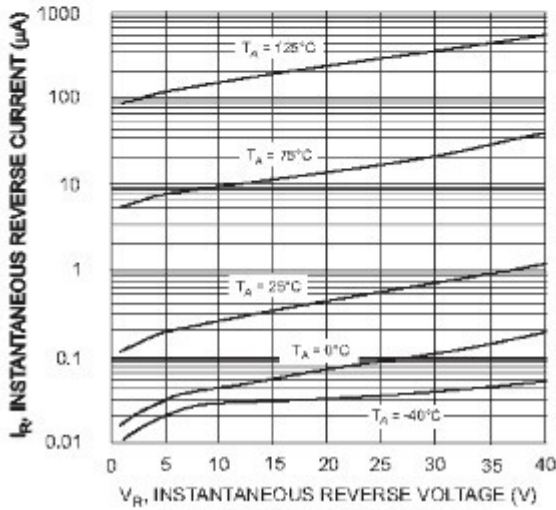


Fig. 3 Typical Reverse Characteristics

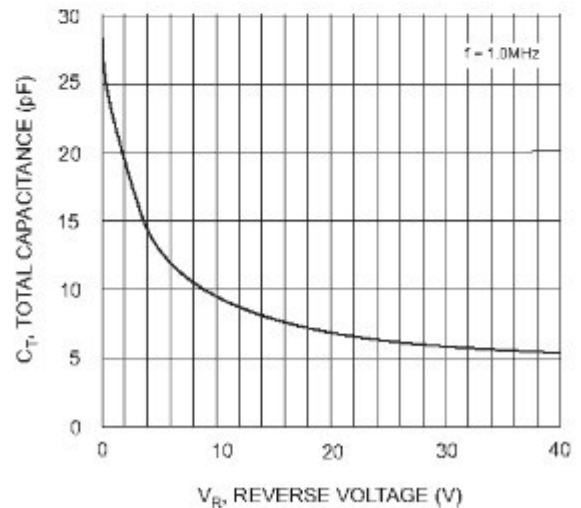


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage



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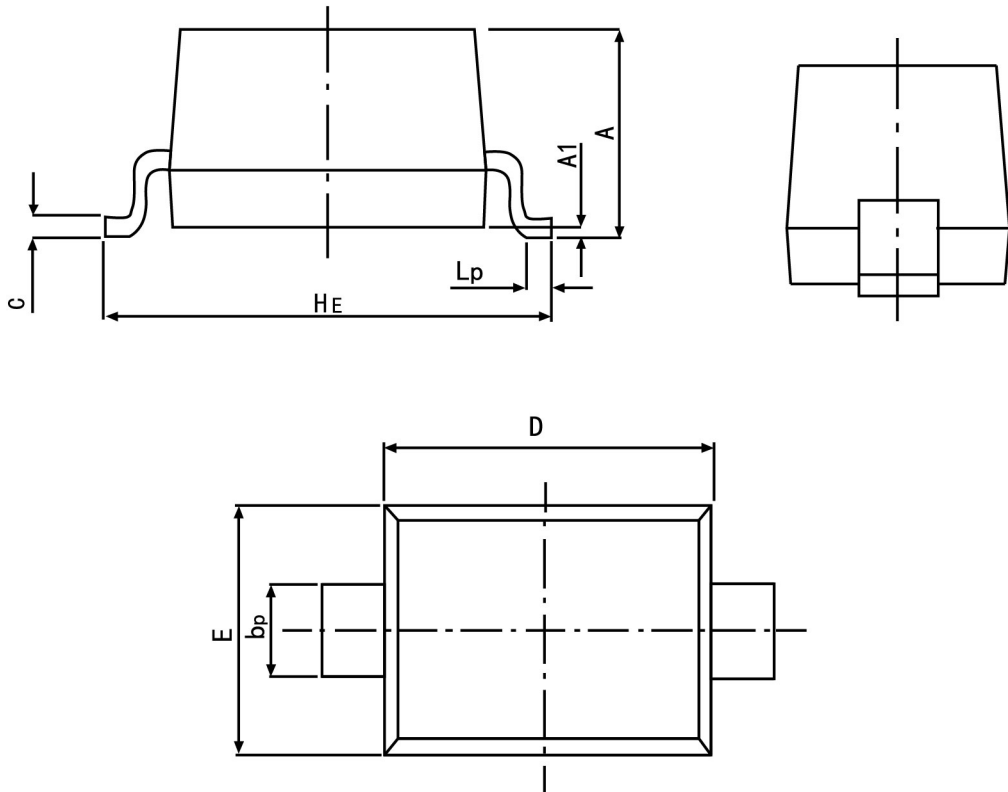
**SD103AW-SD103CW**

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**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-123



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.20
bp	0.50	0.60
C	0.100	0.135
D	2.55	2.75
E	1.55	1.65
HE	3.55	3.85
A1	0.01	0.10
Lp	0.20	0.50