

## Surface Mount Schottky Barrier Diodes

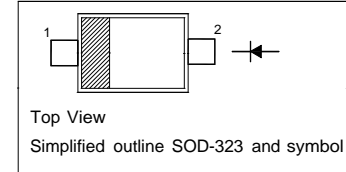
### Features

- Low Forward Voltage

**Marking:** SD103AWS S4  
SD103BWS S5  
SD103CWS S6

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	SD103AWS SD103BWS SD103CWS	40 30 20	V
Reverse Voltage		SD103AWS SD103BWS SD103CWS	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	$P_{tot}$	200	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 $I_R = 10 \mu\text{A}$	$V_{(BR)R}$	SD103AWS SD103BWS SD103CWS	40 30 20	- - -	V	
Reverse Leakage Current at $V_R = 30 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 10 \text{ V}$		$I_R$	SD103AWS SD103BWS SD103CWS	- - -	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 $I_F = I_R = 200 \text{ mA}, I_{tr} = 0.1 I_R, R_L = 100 \Omega$	$t_{rr}$	-	10	-	ns	

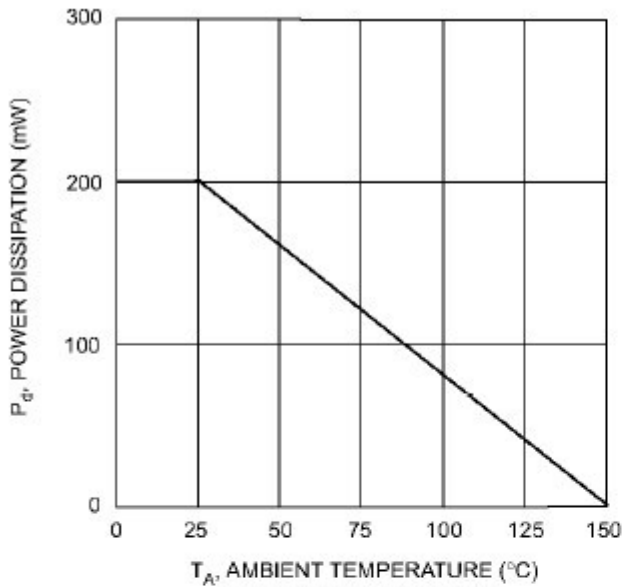


Fig. 1 Power Derating Curve

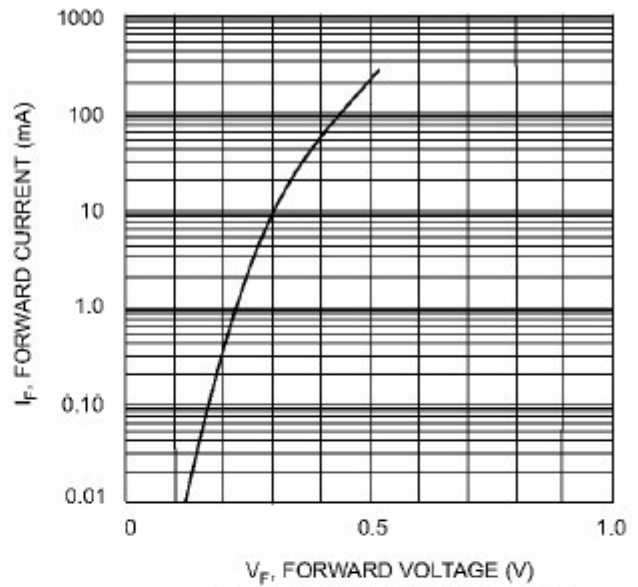


Fig. 2 Typical Forward Characteristics

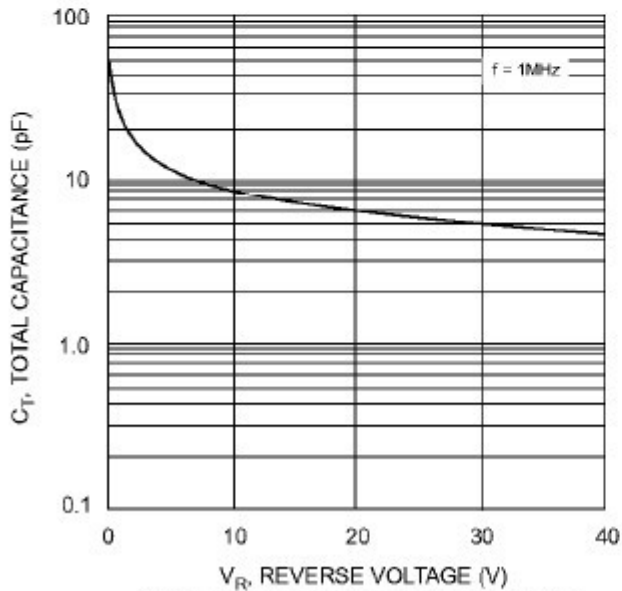
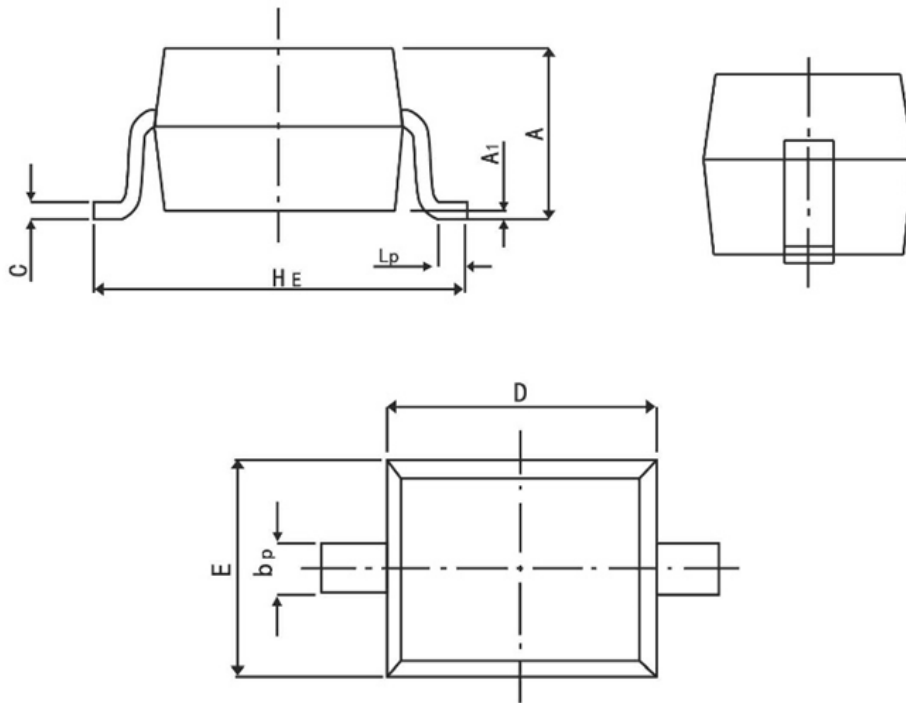


Fig. 3 Total Capacitance vs Reverse Voltage

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.20
bp	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
HE	2.30	2.80
A1	0.01	0.10
Lp	0.20	0.50