

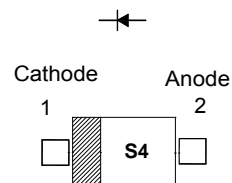


### SD103AWS...SD103CWS

#### Features

- Low Forward Voltage

Marking Code: **S4**



SOD-323

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	SD103AWS SD103BWS SD103CWS	V
		40 30 20	
Reverse Voltage	$V_R$	SD103AWS SD103BWS SD103CWS	V
		40 30 20	
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 $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	SD103AWS SD103BWS SD103CWS	-	-	V
		40 30 20			
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	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

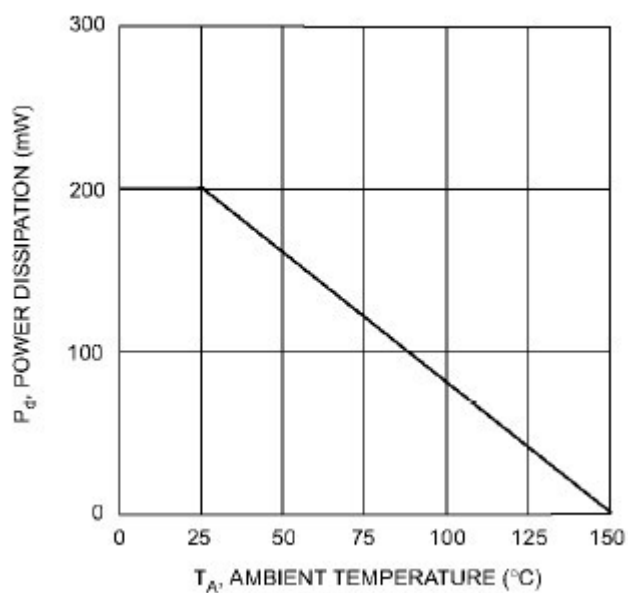


Fig. 1 Power Derating Curve

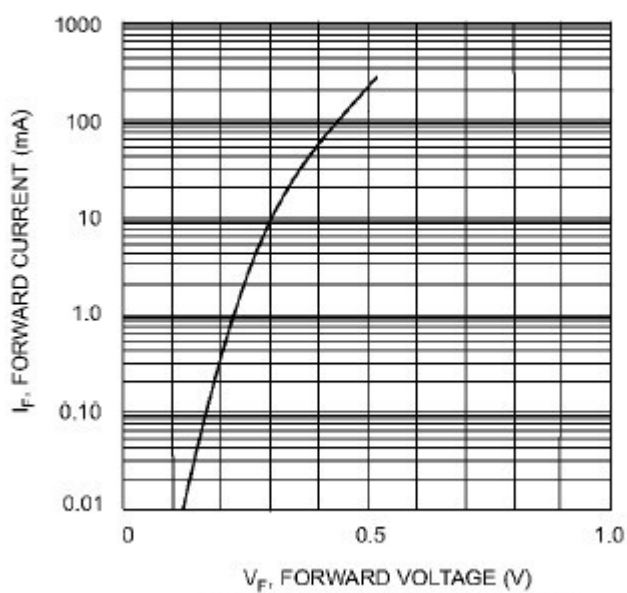


Fig. 2 Typical Forward Characteristics

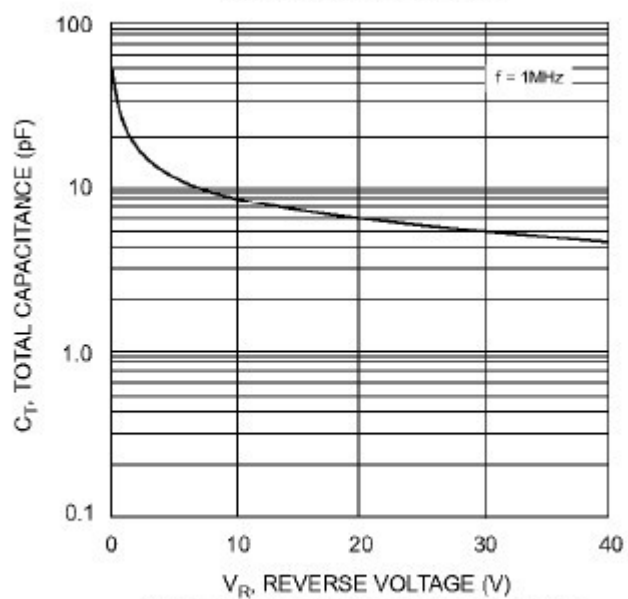


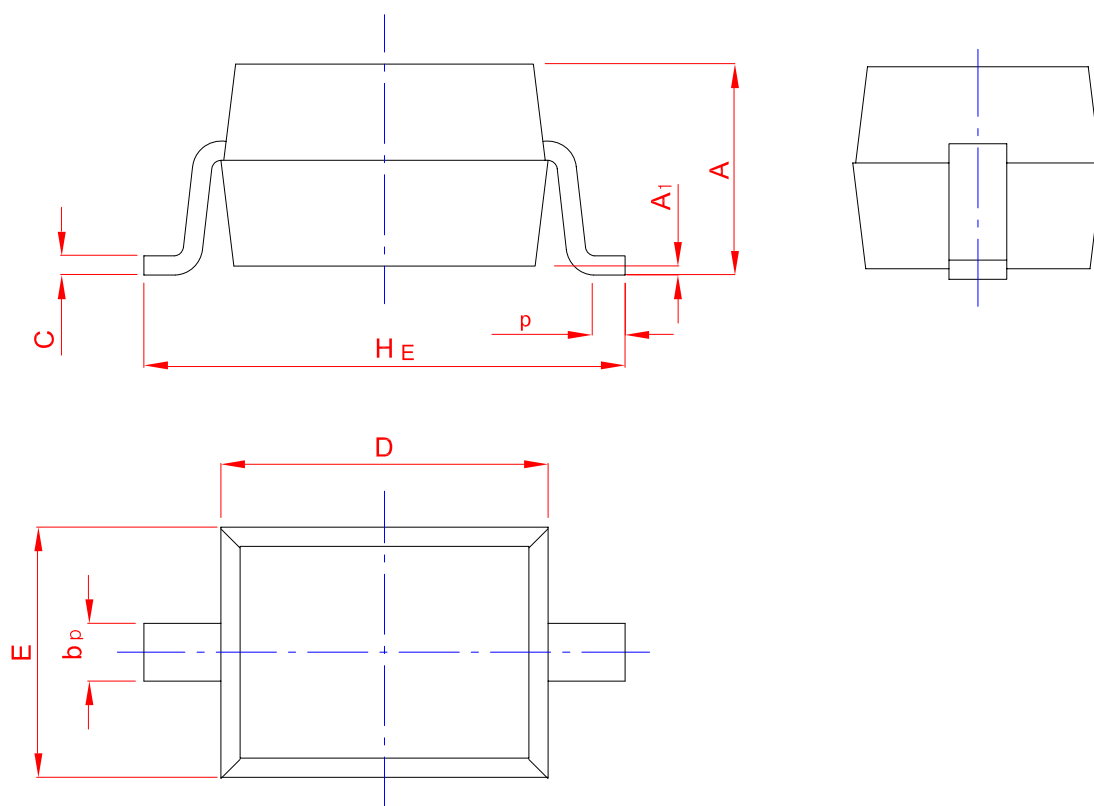
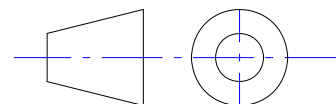
Fig. 3 Total Capacitance vs Reverse Voltage



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.00 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20