

HIGH SPEED SWITCHING APPLICATION

■ Features

- Small Package
- Low Forward Voltage $V_F = 0.23V(TYP.) @ I_F = 5\text{ mA}$



1.Cathode
2.Anode

■ Simplified outline(SOD-523)

■ Marking

Marking	S4
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■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

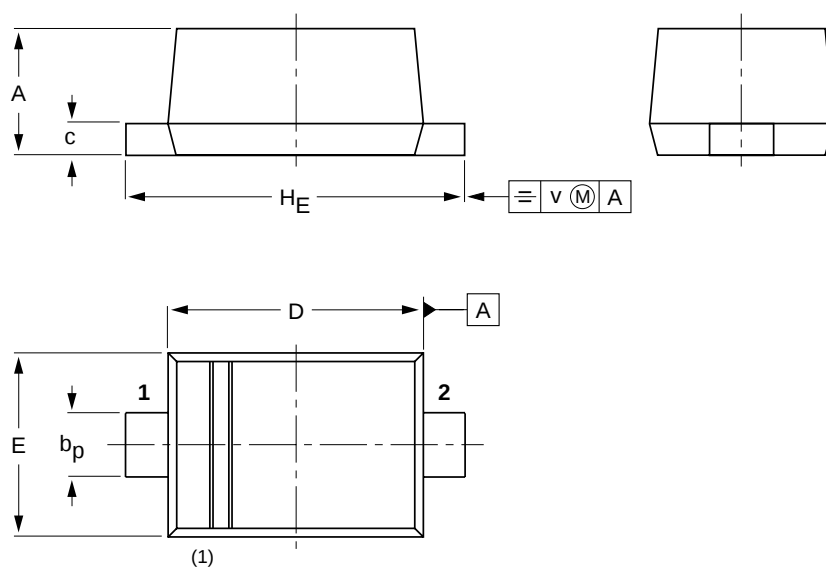
Characteristic	Symbol	Rating	Unit
Maximum (Peak) reverse voltage	V_{RM}	15	V
Reverse voltage	V_R	10	V
Maximum (Peak) forward current	I_{FM}	200	mA
Average forward current	I_O	100	mA
Surge current (10 ms)	I_{FSM}	1	A
Power dissipation	P^*	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to + 125	$^\circ\text{C}$
Operating temperature range	T_{opr}	-44 to +100	$^\circ\text{C}$

* : Mounted on a glass epoxy circuit board of 20 $\square$ 20mm, pad dimension of 4 $\square$ 4mm.

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

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Continuous forward voltage	V_F	$I_F = 1\text{ mA}$		0.18		V
		$I_F = 10\text{ mA}$		0.23	0.3	
		$I_F = 100\text{ mA}$		0.35	0.5	
Reverse current	I_R	$V_R = 10\text{ V}$			20	$\mu\text{ A}$
Total capacitance	C_T	$V_R = 0\text{ V}, f = 1\text{ MHz}$		20	40	pF

■ **SOD-523**



A horizontal scale bar with a black line. Above the line, there are three major tick marks labeled '0', '0.5', and '1 mm'. Between '0' and '0.5', there are four smaller tick marks, dividing the 0.5 mm into five 0.1 mm intervals. Between '0.5' and '1 mm', there are also four smaller tick marks, dividing the 0.5 mm into five 0.1 mm intervals. Below the line, the word 'scale' is centered.

DIMENSIONS (mm are the original dimensions)

UNIT	A	b _p	c	D	E	H _E	v
mm	0.7 0.5	0.35 0.25	0.2 0.1	1.3 1.1	0.9 0.7	1.7 1.5	0.15

Note

1. The marking bar indicates the cathode.