

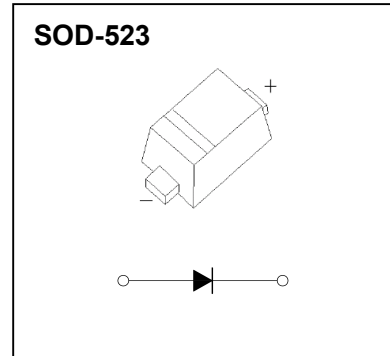
SCHOTTKY BARRIER DIODE

**FEATURES**

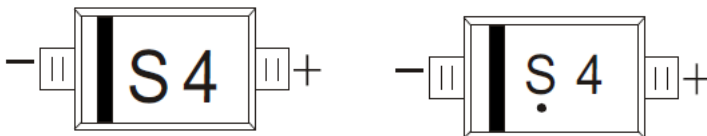
- High Speed
- High Reliability
- Small Package
- Low Forward Voltage

**APPLICATIONS**

- High Speed Switching



**MARKING: S4**



The marking bar indicates the cathode  
 Solid dot = Green molding compound device,if none,  
 the normal device.

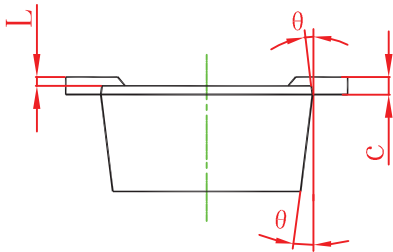
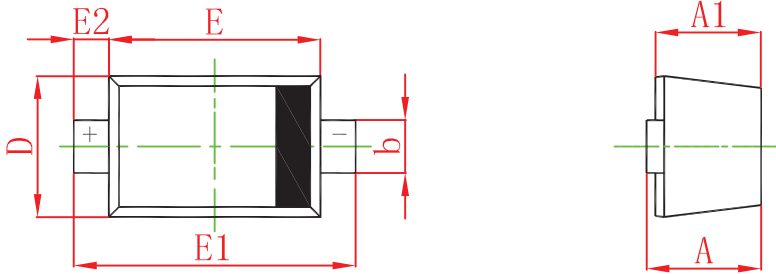
**MAXIMUM RATINGS ( T<sub>a</sub>=25°C unless otherwise noted )**

Symbol	Parameter	Value	Unit
V <sub>R</sub>	DC Blocking Voltage	10	V
I <sub>o</sub>	Continuous Forward Current	100	mA
I <sub>FM</sub>	Peak Forward Current	200	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current @t=8.3ms	1	A
P <sub>D</sub>	Power Dissipation	150	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	667	°C/W
T <sub>j</sub>	Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

**ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°C unless otherwise specified)**

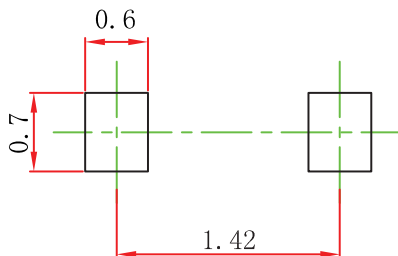
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	10			V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =10V			20	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1mA		0.18		V
		I <sub>F</sub> =5mA			0.3	
		I <sub>F</sub> =100mA			0.5	
Total capacitance	C <sub>tot</sub>	V <sub>R</sub> =0V,f=1MHz			40	pF

SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-523 Suggested Pad Layout



Note:  
 1. Controlling dimension: in millimeters.  
 2. General tolerance: ± 0.05mm.  
 3. The pad layout is for reference purposes only.