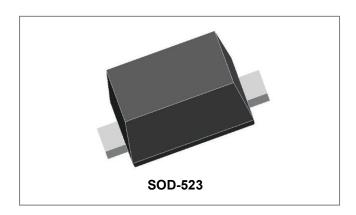


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# **1SS388 FAST SWITCHING DIODE**



#### **Features**

- Fast switching devices
- SOD523 Micro SMD package
- RoHS compliant / Green EMC
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

# **Circuit Diagram**



#### **Mechanical Characteristics**

Case: SOD-523, Molded plastic

Matte Tin (Sn) Lead finish

• Polarity: Cathode Band

Weight: 0.002 grams(approx)

### Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non- Repetitive Peak Reverse Voltage	V <sub>RM</sub>	45	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	V
Forward Continuous Current	l <sub>F</sub>	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	1	Α
Power Dissipation	P <sub>D</sub>	150	mW
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125	°C



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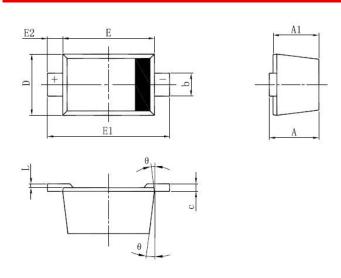


## Electrical Characteristics @TA=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Units	Test Condition
Forward Voltage*	V <sub>FM</sub>	-	0.28 0.36 0.60	٧	@I <sub>F</sub> =1mA @I <sub>F</sub> =10mA @I <sub>F</sub> =50mA
Reverse Leakage Current*	I <sub>RM</sub>	-	5	uA	@V <sub>R</sub> =10V
Capacitance	Ст	-	25	pF	V <sub>R</sub> =0V, f=1.0MHz

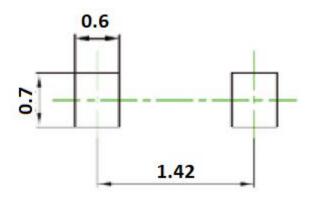
 $<sup>^*</sup>$  Pulse width < 300  $\mu$ s, duty cycle < 2%

### **Mechanical Dimensions SOD-523**



CVMDOL	Millin	neters	Inches		
SYMBOL	Min.	Max.	Min.	Max.	
Α	0.510	0.770	0.020	0.031	
<b>A</b> 1	0.500	0.700	0.020	0.028	
b	0.250	0.350	0.010	0.014	
С	0.080	0.200	0.003	0.008	
D	0.700	0.850	0.028	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		

# **Land Pattern Recommendation SOD-523 (Millimeters)**



Tolerance: ±0.05mm

- China Germany Korea Singapore United States
  - http://www.smc-diodes.com sales@ smc-diodes.com •



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### **Ordering Information**

Device	Package	Shipping
1SS388	SOD-523	3000pcs / reel

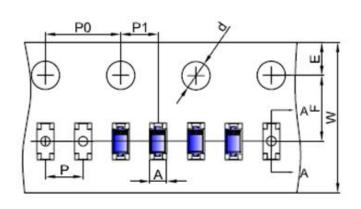
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

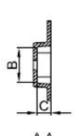
#### **Marking Diagram**



S3 =Marking code

## Carrier Tape & Reel Specification SOD-523





SYMBOL	Millimeters		
STWIDOL	Min.	Max.	
Α	0.85	0.95	
В	1.89	1.99	
С	0.68	0.78	
d	1.40	1.60	
E	1.65	1.85	
F	3.40	3.60	
Р	1.90	2.10	
P0	3.90	4.10	
P1	1.90	2.10	
W	7.90	8.30	

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