

# SSCS521S40D3

## **Schottky Barrier Diode**

#### Features

- ♦ Small surface mounting type
- ♦ Low reverse current and low forward voltage
- ♦ High reliability

# PIN configuration



## Applications

- ♦ High speed switching for detection
- For portable equipment:(i.e. Mobile phone,MP3, MD,CD-ROM,DVD-ROM, Note book PC, etc.)



**Circuit Diagram** 



# Absolute maximum rating @T<sub>A</sub>=25℃

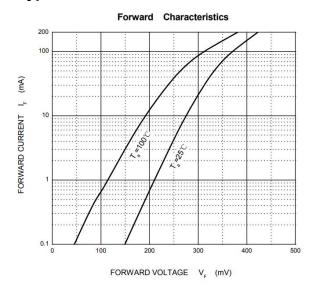
Parameter	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	45	V
Reverse Voltage(DC)	V <sub>R</sub>	40	V
Average Rectified Forward Current	Io	200	mA
Peak Forward Surge Current	I <sub>FSM</sub>	1	А
Operating Temperature	TJ	125	$^{\circ}$
Storage Temperature	T <sub>STG</sub>	-40 ~ +125	$^{\circ}$

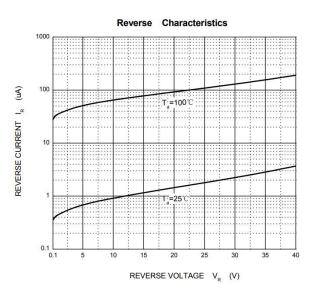
## • Electrical Characteristics @T<sub>A</sub>=25℃

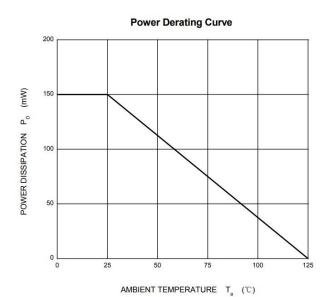
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Maximum reverse breakdown voltage	V <sub>R</sub>	IR=0.1mA	40			V
	V <sub>F</sub>	I <sub>F</sub> = 10mA	0.16		0.30	
Forward Voltage	VF	I <sub>F</sub> = 100mA	0.31		0.45	
	V <sub>F</sub>	I <sub>F</sub> = 200mA	0.41		0.54	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 40V			90	uA



# • Typical Performance Characteristics









# • Package Information

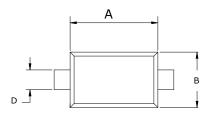
## **Ordering Information**

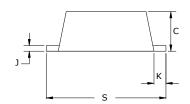
Device	Package	Marking	Qty per Reel	Reel Size
SSCS521S40D3	SOD-523	S	3000	7 Inch

#### **Mechanical Data**

Case: SOD-523

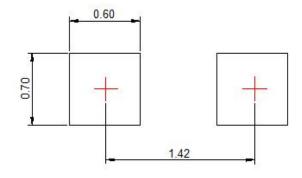
Case Material: Molded Plastic. UL Flammability





DIM	Millimeters				
	Min	Max			
Α	1.10	1.30			
В	0.75	0.85			
С	0.51	0.70			
D	0.25	0.35			
J	0.08	0.15			
K	0.15	0.25			
s	1.50	1.70			

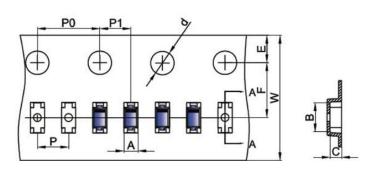
### **Recommended Pad outline**





## SOD-523 Tape and reel

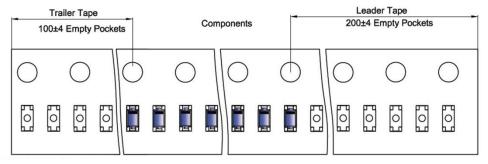
### **SOD-523 Embossed Carrier Tape**



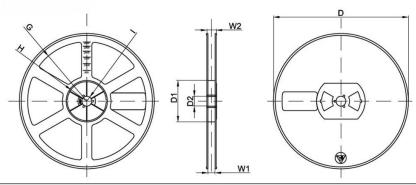
A-A

Dimensions are in millimeter										
Pkg type A B C d E F P0 P P1 W							W			
SOD-523	0.9	1.94	0.73	Ф1.50	1.75	3.50	4.00	2.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

### **SOD-523 Tape Leader and Trailer**



#### SOD-523 Reel



Dimensions are in millimeter								
Reel Option D D1 D2 G H I W1 W2							W2	
7"Dla	Ф178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

Note: The SOD-523 package requires staggered loading of 3K per reel, meaning one empty slot between each loaded slot.



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