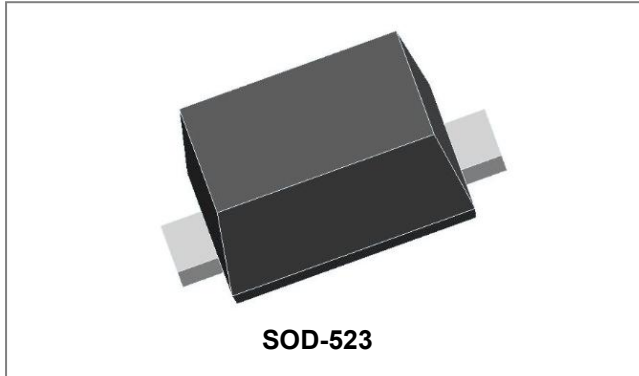


## RB521M5 Schottky Barrier Diode



### Features

- Low current rectification
- Low forward voltage
- SOD523 Micro SMD package
- RoHS compliant
- This is a Halogen Free Device
- 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 @ $T_A=25^\circ\text{C}$ unless otherwise specified

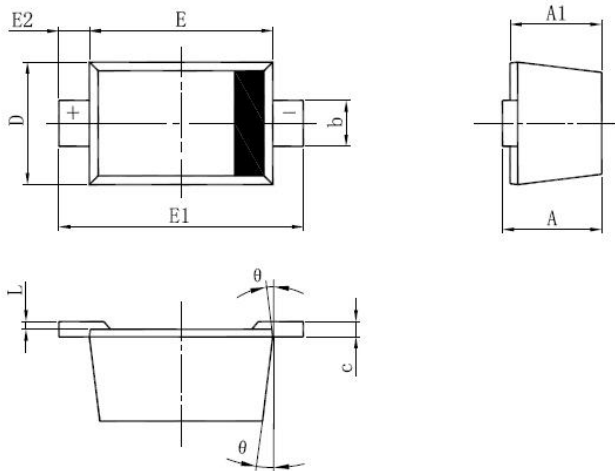
Characteristic	Symbol	Limits	Unit
Non- Repetitive Peak Reverse Voltage	$V_{RM}$	30	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	30	V
Continuous Forward Current	$I_O$	100	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	0.5	A
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125	$^\circ\text{C}$

### Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

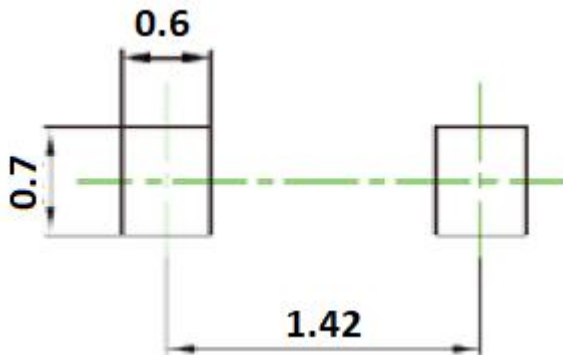
Characteristic	Symbol	Min	Max	Units	Test Condition
Breakdown Voltage*	$V_{BR}$	30	-	V	@ $I_R=100\mu\text{A}$
Forward Voltage*	$V_{FM}$	-	0.35 0.40	V	@ $I_F=10\text{mA}$ @ $I_F=20\text{mA}$
Reverse Leakage Current*	$I_{RM}$	-	10 50	$\mu\text{A}$	@ $V_R=10\text{V}$ @ $V_R=30\text{V}$

\* Pulse width < 300  $\mu\text{s}$ , duty cycle < 2%

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •

**Mechanical Dimensions SOD-523**


SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
<b>A</b>	0.510	0.770	0.020	0.031
<b>A1</b>	0.500	0.700	0.020	0.028
<b>b</b>	0.250	0.350	0.010	0.014
<b>c</b>	0.080	0.200	0.003	0.008
<b>D</b>	0.700	0.850	0.028	0.033
<b>E</b>	1.100	1.300	0.043	0.051
<b>E1</b>	1.500	1.700	0.059	0.067
<b>E2</b>	0.200 REF		0.008 REF.	
<b>L</b>	0.010	0.070	0.001	0.003
<b>θ</b>	7° REF		7° REF	

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


Tolerance: ±0.05mm

**Ordering Information**

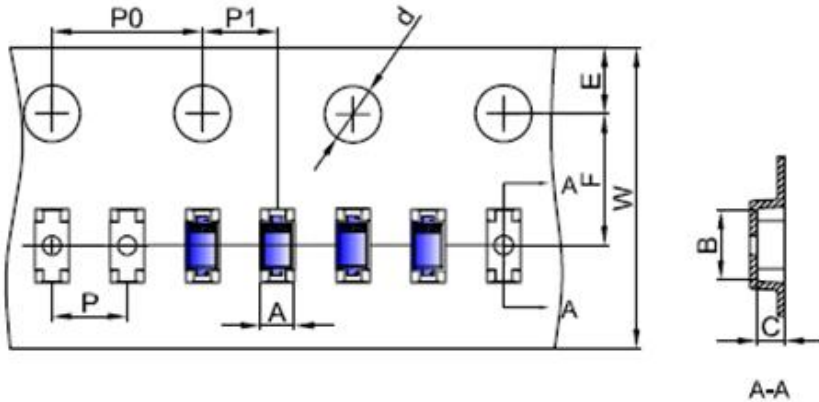
Device	Package	Shipping
RB521M5	SOD-523	8000pcs / reel

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

**Marking Diagram**


F =Marking code

**Carrier Tape & Reel Specification SOD-523**



SYMBOL	Millimeters	
	Min.	Max.
A	0.85	0.95
B	1.89	1.99
C	0.68	0.78
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	1.90	2.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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