

PSBD5D40V03

Schottky Barrier Diode

Feature

- Low Forward Voltage Drop
- > Surface Mount Package Ideally Suited for Automated Insertion
- > Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

Mechanical Characteristics

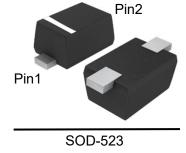
- ➤ Case: SOD-523
- Lead finish:100% matte Sn(Tin)
- > Mounting position: Any
- Qualified max reflow temperature:260°C
- ➢ Pure tin plating: 7 ~ 17 um
- ➢ Pin flatness:≤3mil

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Reverse Voltage	V _R	40	V
Forward Current	I _F	300	mA
Forward Surge Current at t=8.3ms	I _{FSM}	1.0	А
Power Dissipation	P _D	200	mW
Junction temperature	TJ	125	°C
Storage temperature	T _{stg}	-55 ~ +125	°C

Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Breakdown Voltage	V _{BR}	Ι _R = 500μΑ	40	-	-	V
Forward Voltage	V _F	I _F = 200mA	-	-	0.6	V
		I _F = 300mA	-	-	0.72	
Reverse current	I _R	V _R = 10V	-	-	1.0	μA
		V _R = 40V	-	-	5.0	

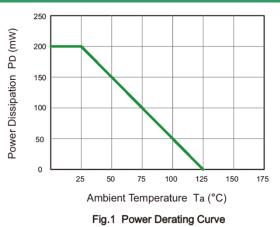






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Typical Characteristics



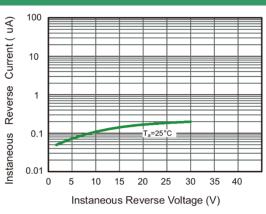
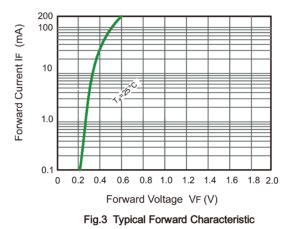
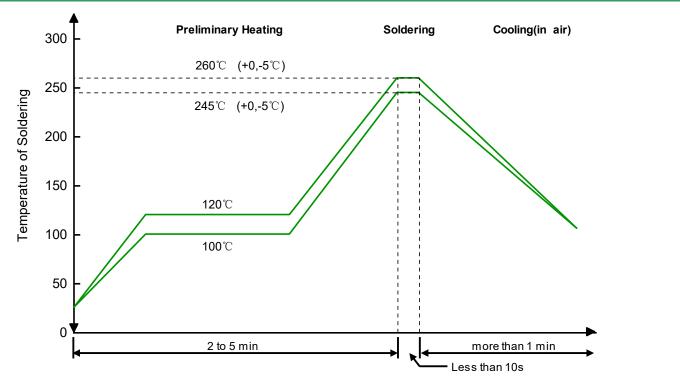


Fig.2 Typical Instaneous Reverse Characteristics



Solder Reflow Recommendation

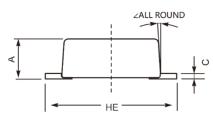


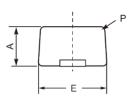
Remark: Pb free for 260°C; Pb for 245°C.

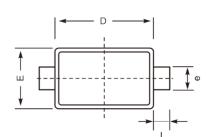
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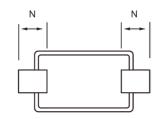
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Product dimension (SOD-523)



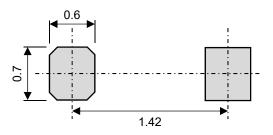






bottom view

Dim	Millimeters		Inches		
Dim	Min	Max	Min	Max	
А	0.51	0.77	0.020	0.030	
е	0.25	0.35	0.010	0.014	
С	0.08	0.15	0.003	0.006	
D	1.10	1.30	0.043	0.051	
E	0.75	0.99	0.030	0.039	
HE	1.50	1.70	0.059	0.067	
N	0.35 Ref.		0.014 Ref.		
L	0.20 Ref.		0.008 Ref.		
L	R0.1 ALL ROUND		R4.0 ALL ROUND		
۷	9°	11°	9°	11°	



Suggested PCB Layout

Unit:mm

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