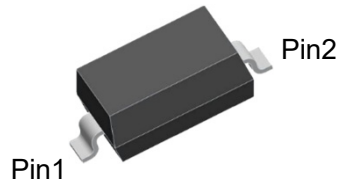
Prisemi®

PSBD3D40V4H

Schottky Barrier Diode

Feature

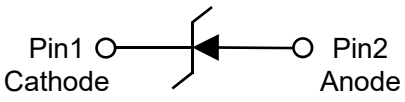
- High Current Rectifier Schottky Diodes
- Low Voltage, Low Inductance
- For detection and step-up-conversion



SOD-323(Top View)

Mechanical Characteristics

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz



Circuit Diagram

Marking (Top View)

Absolute maximum rating@25℃

Rating		Symbol	Value	Units
Peak Repetitive Reverse Voltage		V_{RRM}	40	V
RMS Voltage		V_{RMS}	28	V
DC Blocking Voltage		V_{DC}	40	V
Average Forward Rectified Current		$I_{F(AV)}$	4.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	30	A
Forward Voltage	I_F = 0.5A	V_F	0.34(Typ)	V
	I_F = 1A		0.38(Typ)	
	I_F = 4A		0.53(Typ) 0.55(Max)	
DC Reverse Current at Rated DC Blocking Voltage		I_R	0.15	mA
Typical Junction Capacitance @ V_R=4V, f=1MHz		C_J	250	pF
Typical Thermal Resistance[1)]		$R_{\theta JA}$	150	℃/W
		$R_{\theta JL}$	60	
Junction and Storage Temperature Range		T_J,T_{STG}	-40 ~ +125	℃

Notes:
1. P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.

Typical Characteristics

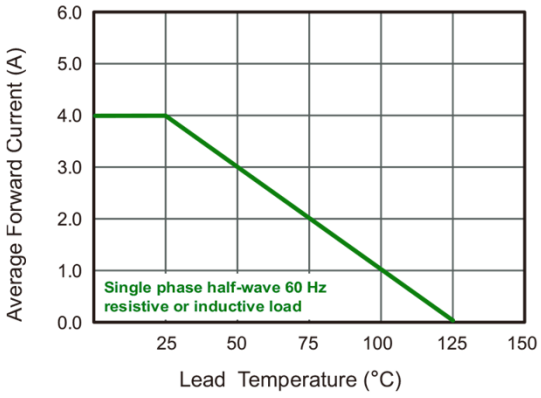


Fig.1 Forward Current Derating Curve

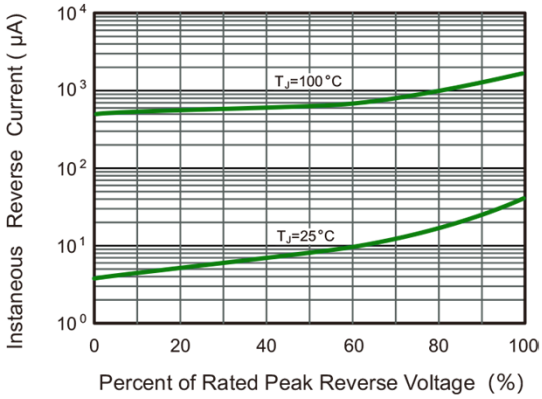


Fig.2 Typical Reverse Characteristics

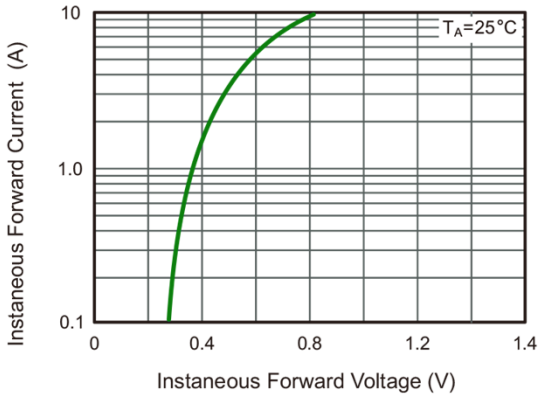


Fig.3 Typical Forward Characteristic

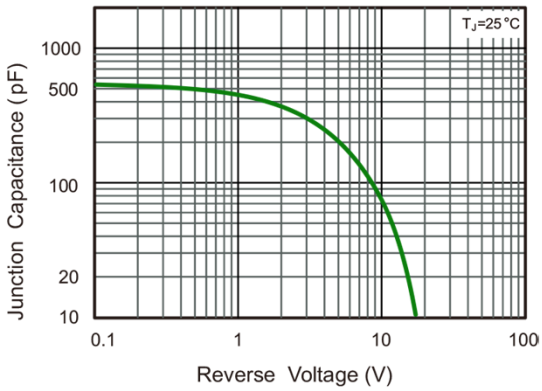


Fig.4 Typical Junction Capacitance

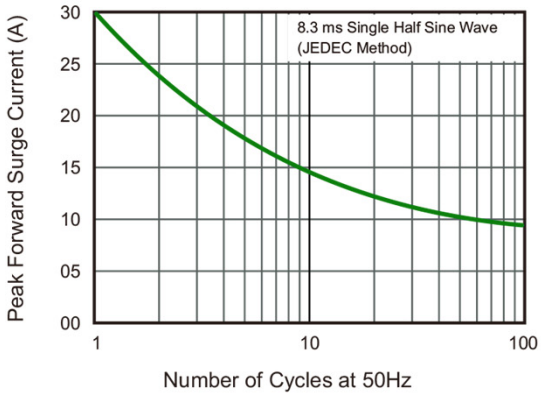
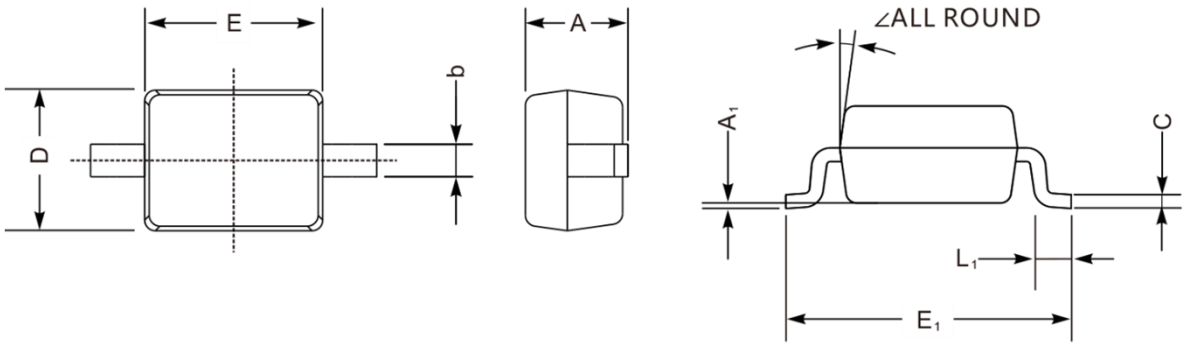
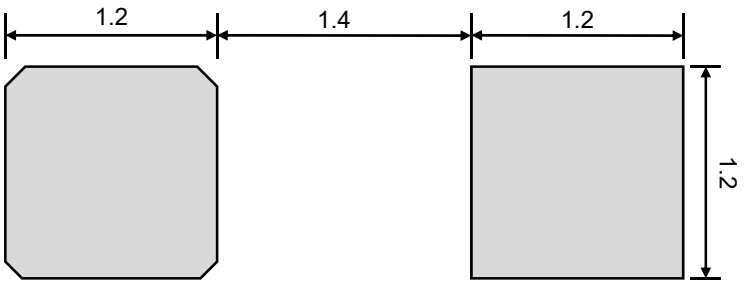


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Product dimension (SOD-323)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.10	0.031	0.043
A1	-	0.20	-	0.008
C	0.08	0.15	0.003	0.006
D	1.20	1.40	0.047	0.055
E	1.40	1.80	0.055	0.071
E1	2.55	2.75	0.100	0.108
b	0.25	0.40	0.010	0.016
L1	0.20	0.45	0.008	0.018
∠	9°		9°	



Suggested PCB Layout

Unit: mm

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