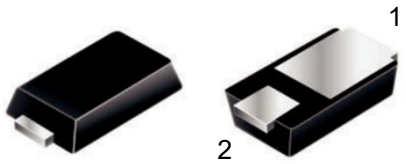
Prisemi®

PSBD3DHxxV1H

Schottky Barrier diode

Feature

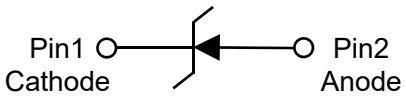
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



SOD-323HE

Mechanical Characteristics

- Case: SOD-323HE
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:5.4mg/0.00019oz



Circuit Diagram

Absolute maximum rating@25℃

Parameter		Symbol	PSBD3D H40V1H	PSBD3D H60V1H	PSBD3D H100V1H	PSBD3D H150V1H	PSBD3D H200V1H	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	40	60	100	150	200	V
Maximum RMS Voltage		V_{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage		V_{DC}	40	60	100	150	200	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	1.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	25					A
Max Instantaneous Forward Voltage at 1A		V_F	0.55	0.7	0.85	0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T_a = 25℃	I_R	0.5	0.3				mA
	T_a = 100℃		20	15				
Type Junction Capacitance[1)]		C_J	60	40				pF
Typical Thermal Resistance[2)]		$R_{\theta JA}$	150					℃/W
Operating Junction Temperature Range		T_J	125					℃
Storage Temperature Range		T_{STG}	-55 ~ +150					℃

Notes:
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 8X 8 mm copper pad areas.

Typical Characteristics

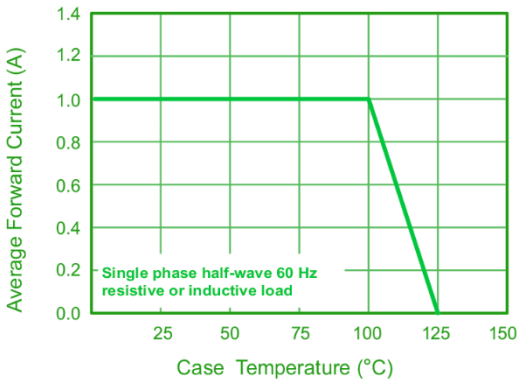


Fig.1 Forward Current Derating Curve

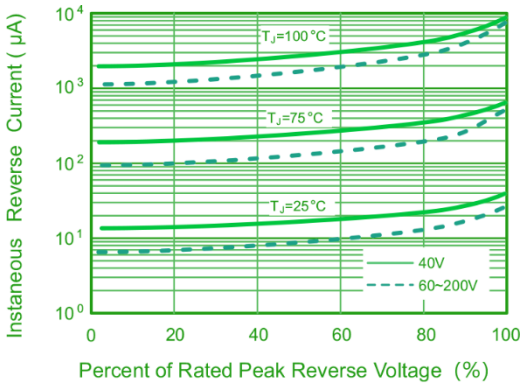


Fig.2 Typical Reverse Characteristics

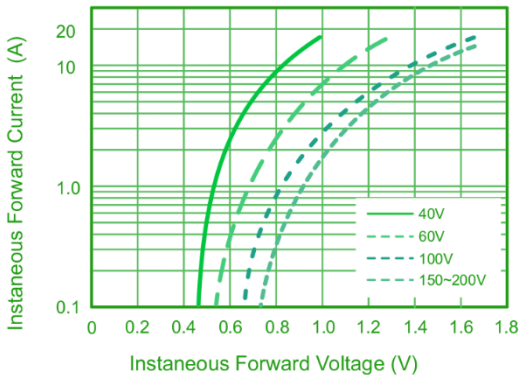


Fig.3 Typical Forward Characteristic

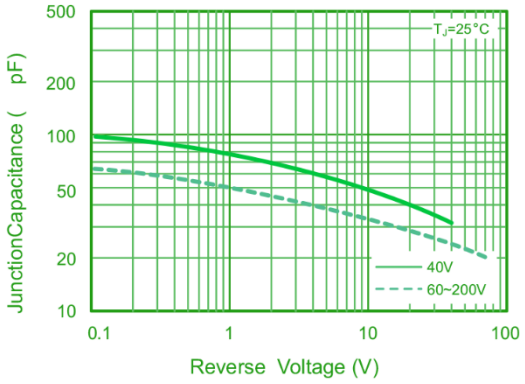


Fig.4 Typical Junction Capacitance

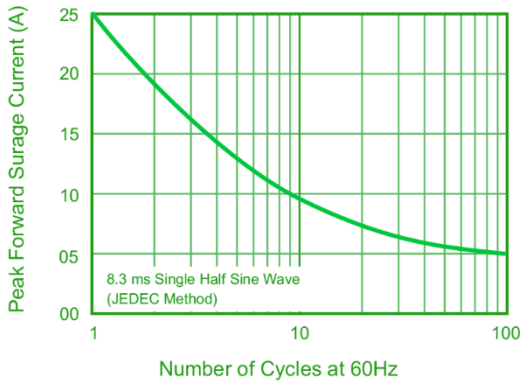


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

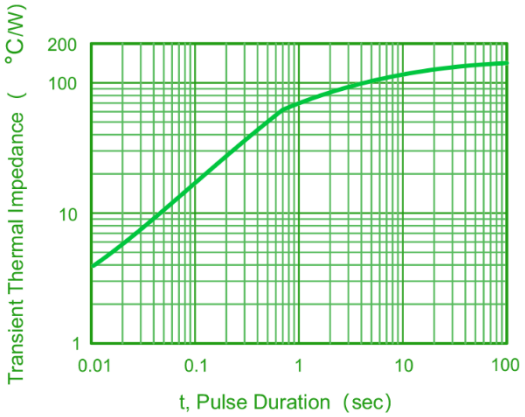
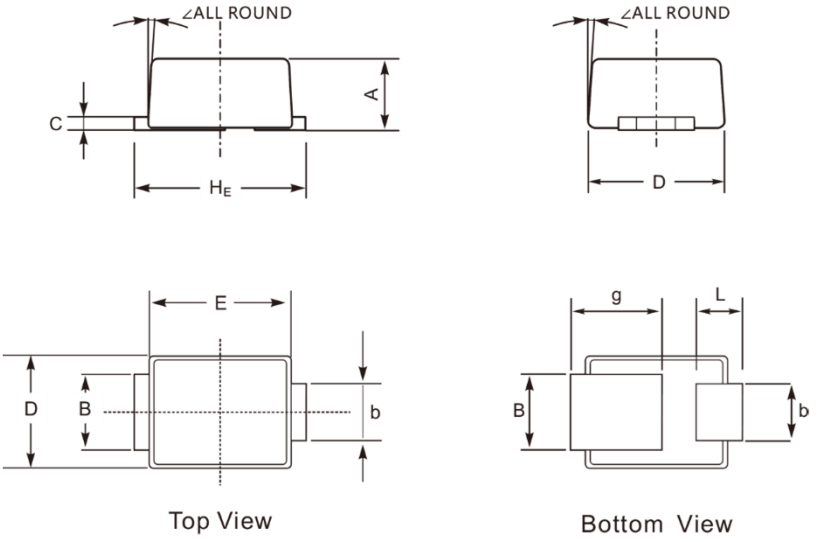
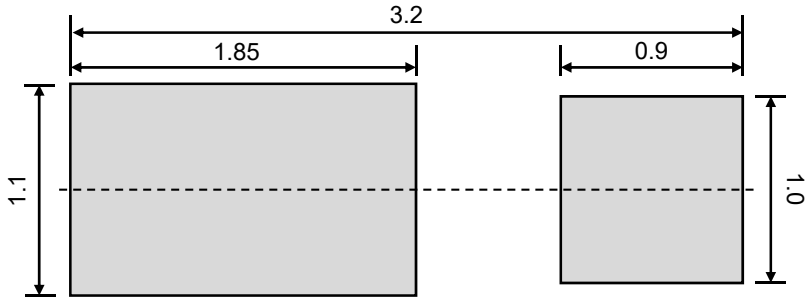


Fig.6- Typical Transient Thermal Impedance

Product dimension (SOD-323HE)



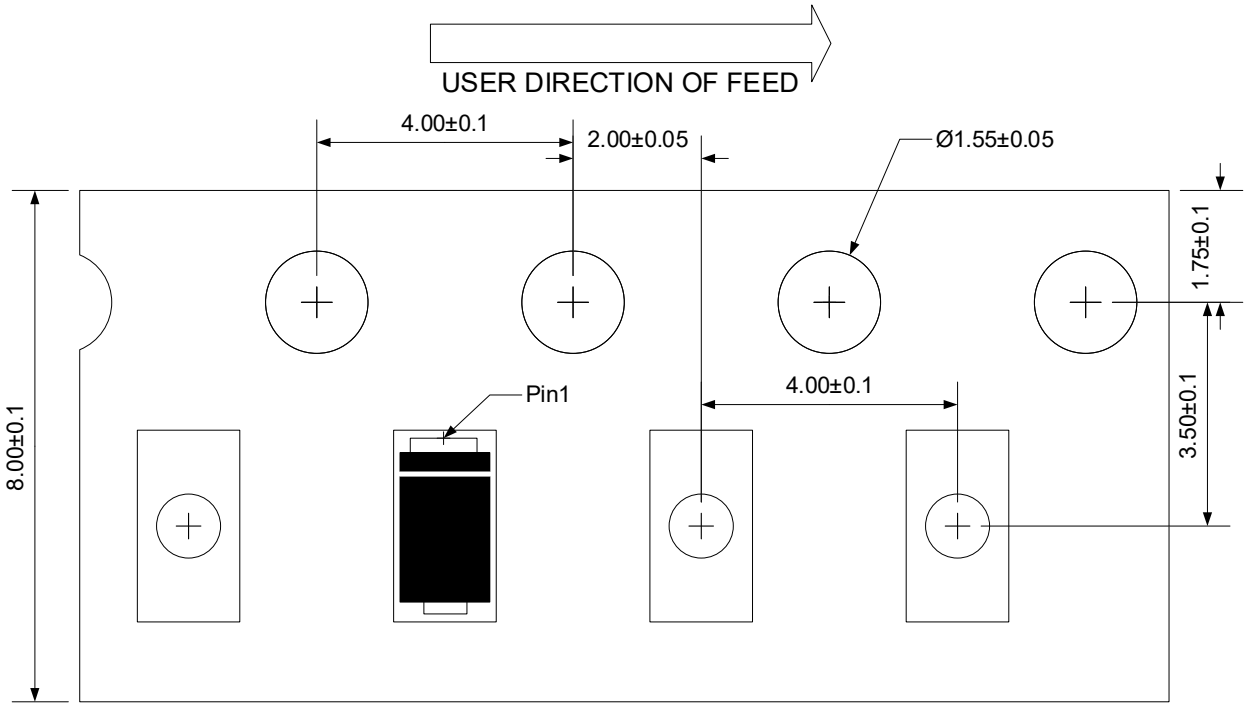
Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.57	0.77	0.022	0.030
b	0.45	0.75	0.018	0.030
B	0.65	0.95	0.026	0.037
C	0.10	0.20	0.004	0.008
D	1.25	1.45	0.049	0.057
E	2.10	2.30	0.083	0.091
H_E	2.30	2.70	0.091	0.106
g	1.10	1.55	0.043	0.061
L	0.25	0.50	0.010	0.020
∠	12°			



Suggested PCB Layout

Unit: mm

Load with information

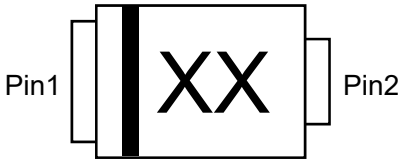


Unit:mm

Ordering information

Package	Reel	Shipping
SOD-323HE	7"	3000 / Tape & Reel

Marking Information



Note: Detailed Marking See table right

Type Number	Marking Code
PSBD3DH40V1H	K4
PSBD3DH60V1H	K6
PSBD3DH100V1H	K10
PSBD3DH150V1H	K15
PSBD3DH200V1H	K20

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