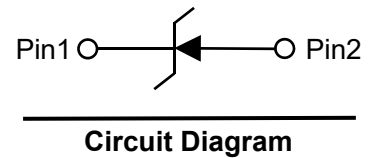
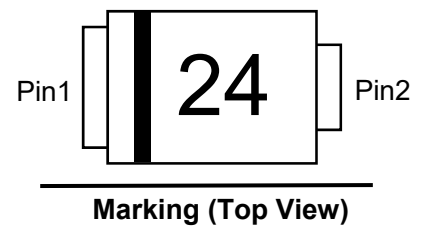
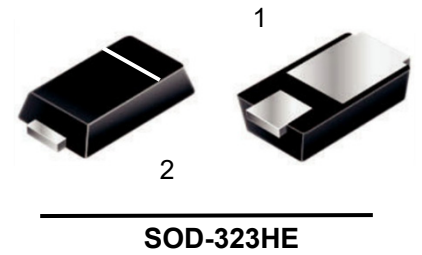


Surface Mount Schottky Barrier Rectifier

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



Mechanical Characteristics

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

Absolute Maximum Ratings and Electrical characteristics@25°C

Rating	Symbol	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25	A
Forward Voltage	V_F	$I_F = 1A$	0.39(Typ)0.47(Max)
		$I_F = 2A$	0.44(Typ)0.53(Max)
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a = 25^\circ C$	0.3
		$T_a = 100^\circ C$	15
Typical Junction Capacitance ¹⁾	C_J	330	pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	130	°C/W
Operating Junction Temperature Range	T_J	125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4V D.C

2. P.C.B. mounted with 3.81*3.81cm copper pad areas.

Typical Characteristics

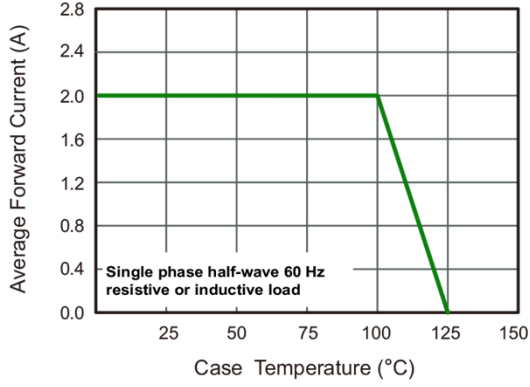


Fig.1 Forward Current Derating Curve

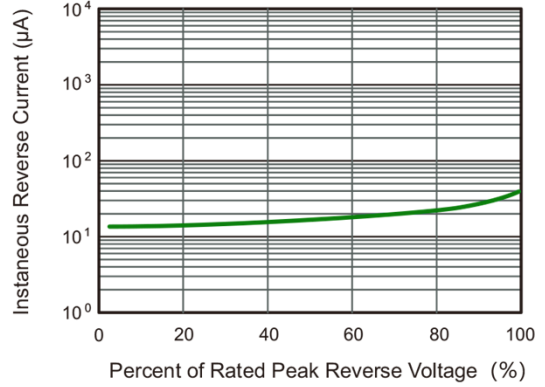


Fig.2 Typical Reverse Characteristics

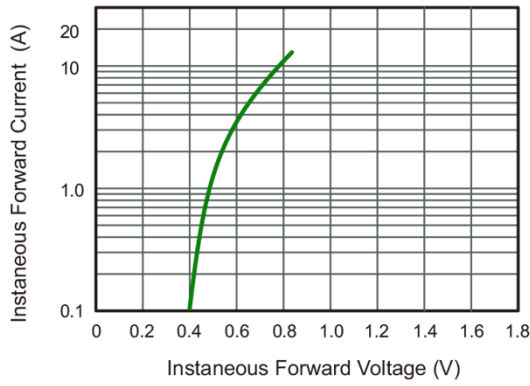


Fig.3 Typical Forward Characteristic

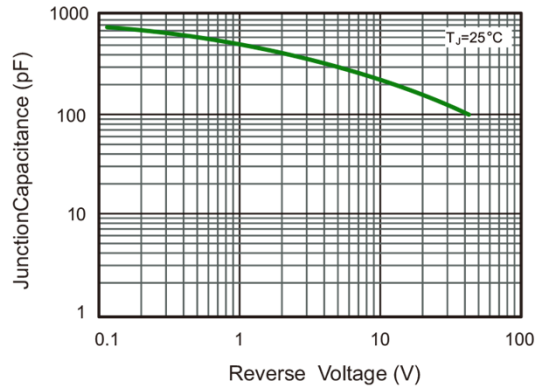


Fig.4 Typical Junction Capacitance

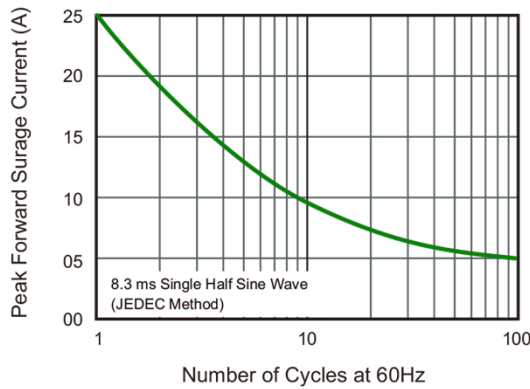


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

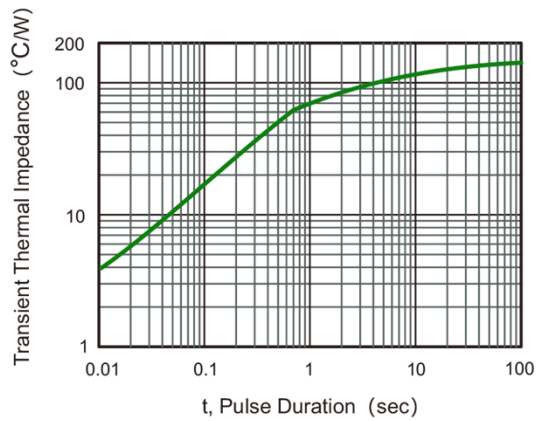
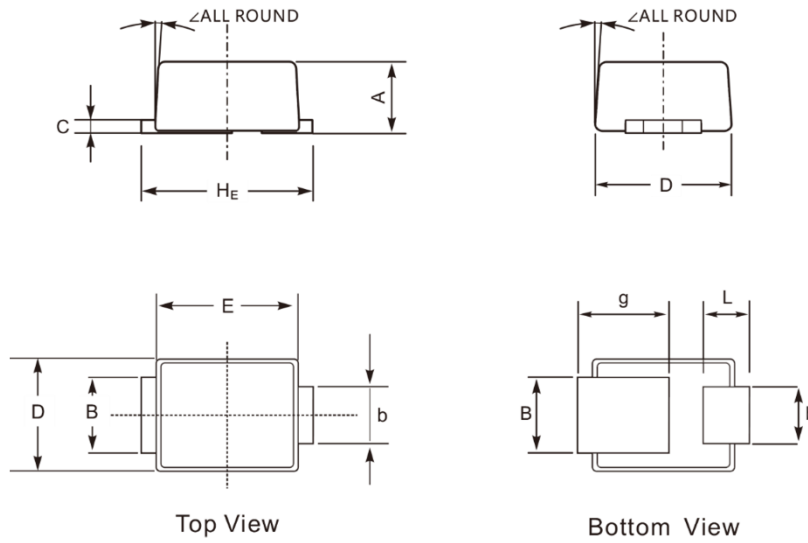


Fig.6- Typical Transient Thermal Impedance

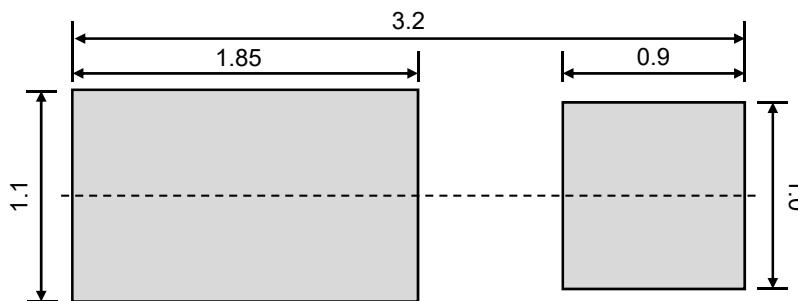
Surface Mount Schottky Barrier Rectifier

PSBD3DH40V2H

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°			



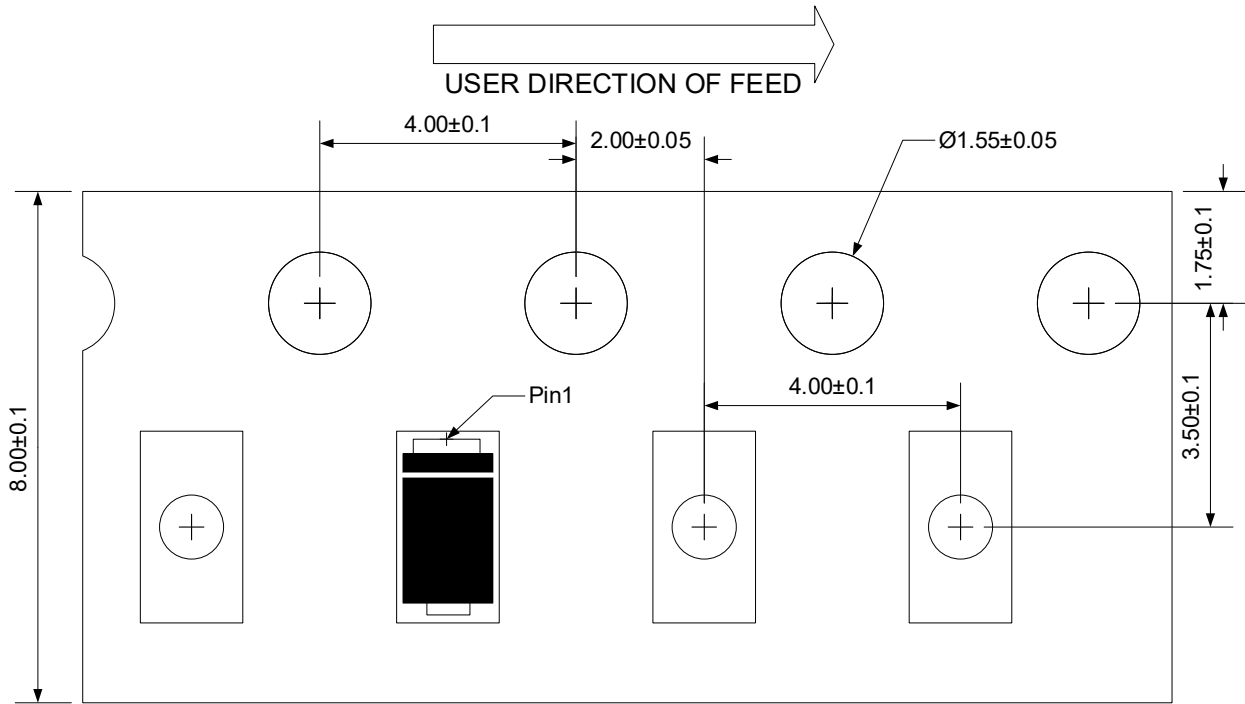
Suggested PCB Layout

Unit:mm

Surface Mount Schottky Barrier Rectifier

PSBD3DH40V2H

Load with information




Unit:mm

Ordering information

Device	Package	Shipping
PSBD3DH40V2H	SOD-323HE	3000 / Tape & Reel


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