

SDB13HT

Schottky Barrier Rectifier

Features

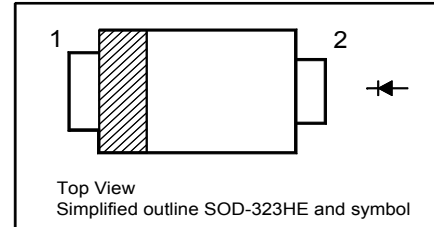
- Low profile surface mount package
- Low power loss,high efficiency

Applications

- Switching power supply
- Reversed battery connection protdction
- DC/DC converter

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Forward Current	I_F	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC methode)	I_{FSM}	25	A
Power Dissipation	P_D	667	mW
Operating Junction Temperature Range	T_j	- 40 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^\circ\text{C}$

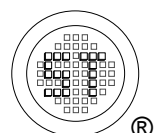
Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	150	$^\circ\text{C/W}$

¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 200 \mu\text{A}$	$V_{(BR)R}$	30	-	-	V
Forward Voltage at $I_F = 1 \text{ A}$	V_F	-	-	0.47	V
Reverse Current at $V_R = 5 \text{ V}$ at $V_R = 30 \text{ V}$	I_R	-	-	40 200	μA
Junction Capacitance at $V_R = 10 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	35	-	pF



Electrical Characteristics Curves

Fig 1. Forward Current Derating Curve

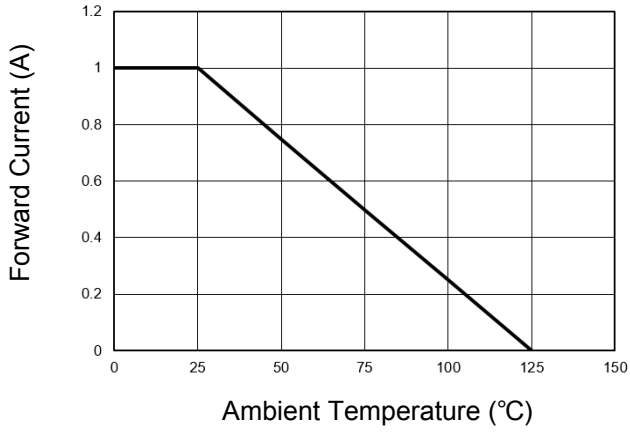


Fig 2. Forward Characteristics Curve

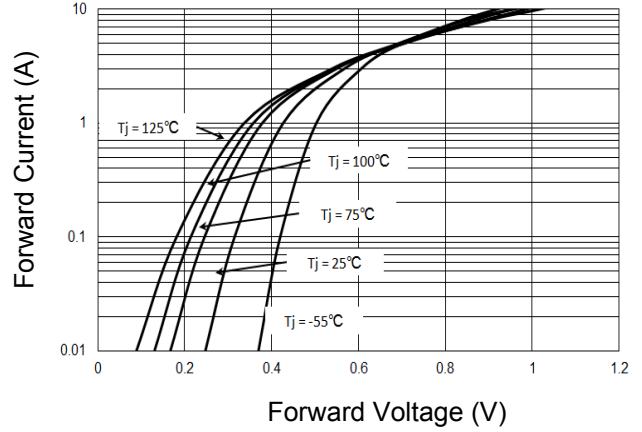


Fig 3. Reverse Characteristics Curve

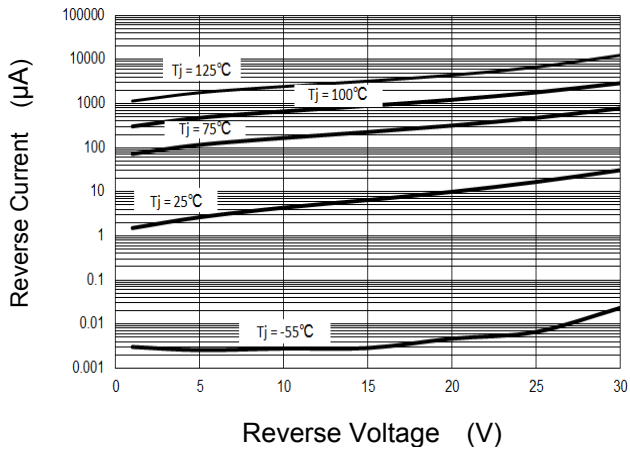
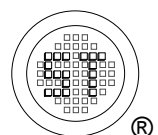
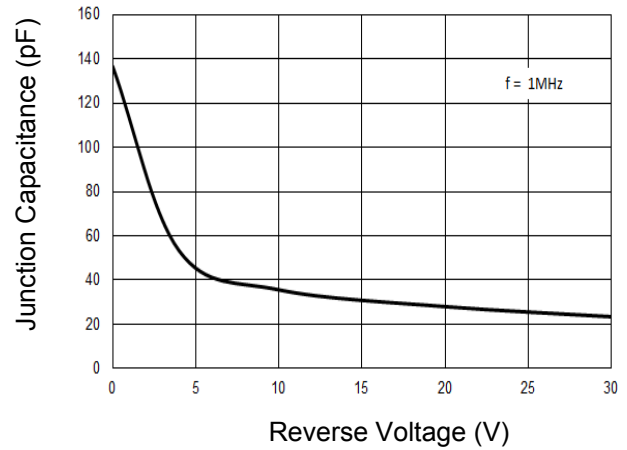


Fig 4. Junction Capacitance

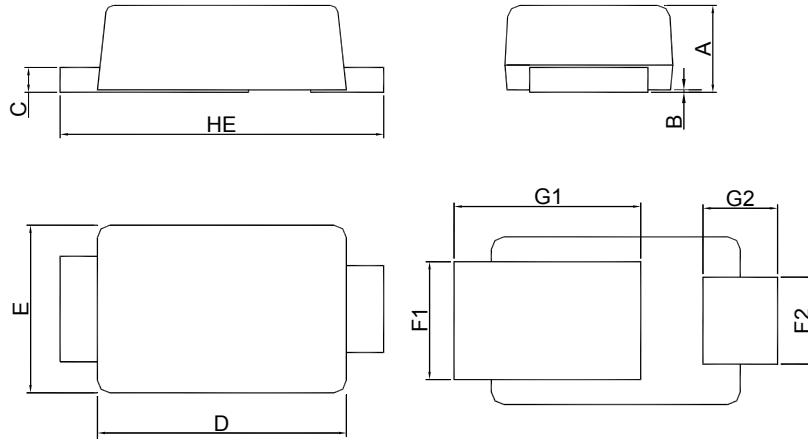


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PACKAGE OUTLINE

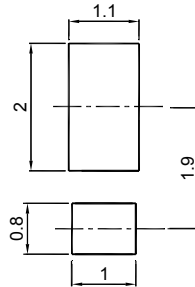
Plastic surface mounted package; 2 leads

SOD-323HE



UNIT	A	B	C	D	E	F1	F2	G1	G2	H _E
mm	0.7	0.02	0.2	2	1.35	0.95	0.7	1.5	0.6	2.6
	0.5	0	0.1	1.8	1.15	0.75	0.5	1.3	0.4	2.4

Recommended Soldering Footprint



Packing information

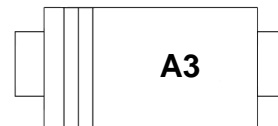
Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323HE	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" A3 " = Part No.

" III " = Cathode line

Font type: Arial



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