

SDB13LHT-HAF

SCHOTTKY BARRIER DIODE

Features

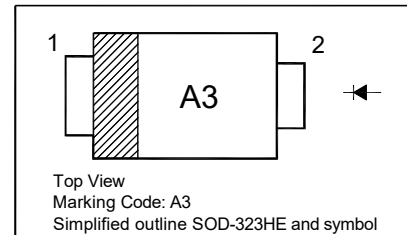
- Low profile surface mount package
- Low power loss,high efficiency
- Halogen and Antimony Free(HAF), RoHS compliant

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 ($t_p = 8.3$ ms)	I_{FSM}	25	A
Operating Temperature Range	T_J	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance Junction to Ambient Air ¹⁾	$R_{\theta JA}$	177	$^\circ\text{C/W}$

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	$V_{(BR)R}$	30	-	-	V
Forward Voltage at $I_F = 0.1\text{ A}$	V_F	-	-	0.33	V
at $I_F = 0.7\text{ A}$		-	0.37	-	V
at $I_F = 1\text{ A}$		-	-	0.42	V
Reverse Current at $V_R = 5\text{ V}$	I_R	-	-	50	μA
at $V_R = 30\text{ V}$		-	-	250	μA
Junction Capacitance at $V_R = 10\text{ V}$, $f = 1\text{ MHz}$	C_j	-	54	-	pF

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Electrical characteristics curves

Fig 1. Reverse Characteristics Curve

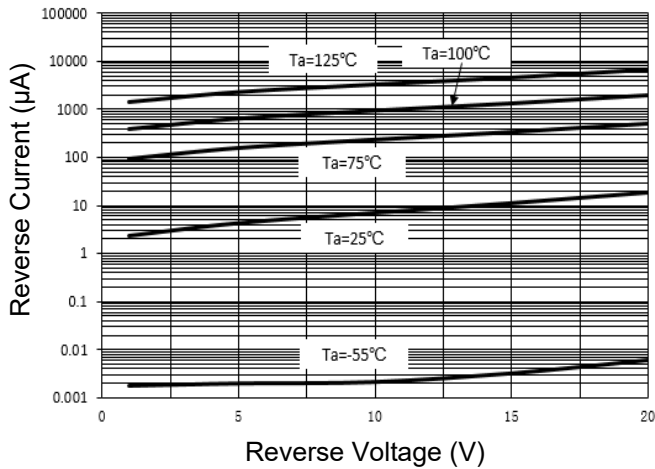


Fig 2. Forward Characteristics Curve

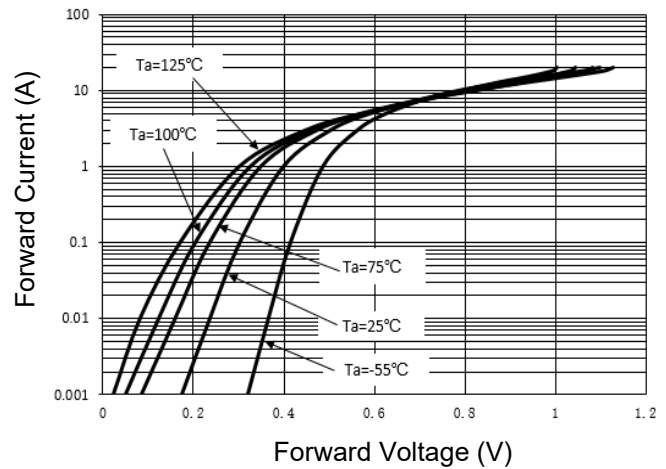


Fig 3. Junction Capacitance

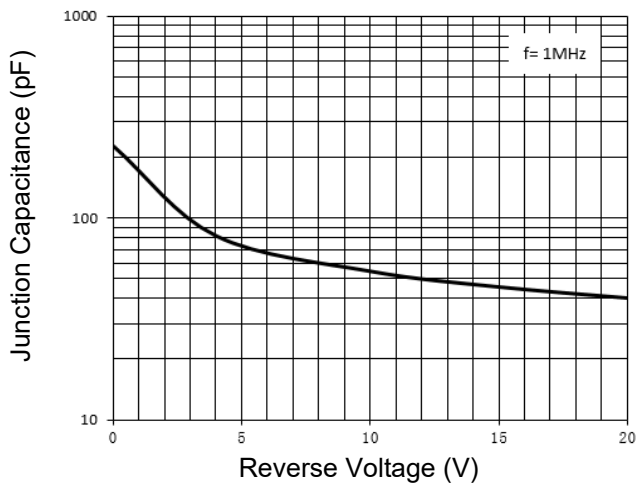


Fig 4. Forward Current Derating Curve

