

SDB410HS

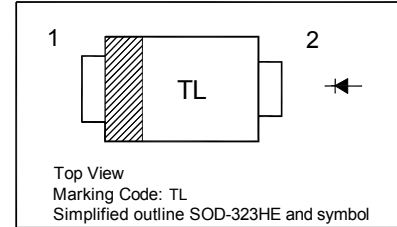
SCHOTTKY BARRIER DIODE

Features

- Extremely Low leakage
- Low V_F , fast switching Schottky
- High current capability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	10	V
Forward Current	I_F	750	mA
Peak Repetitive Forward Current Rectangular Pulse Duty Cycle	I_{FRM}	1.35	A
Non-Repetitive Peak Forward Current ($t \leq 100 \mu\text{s}$) ($t \leq 8.3 \text{ ms}$)	I_{FSM}	17 25	A
Power Dissipation	P_D	330 ¹⁾ 390 ²⁾	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	379 ¹⁾ 319 ²⁾	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ For a device surface mounted on 25 mm X 25 mm X 1.6 mm FR4 PCB with high coverage of single sided 1 oz copper, in still air conditions.

²⁾ For a device surface mounted on FRB PCB measured at $t < 5 \text{ s}$.

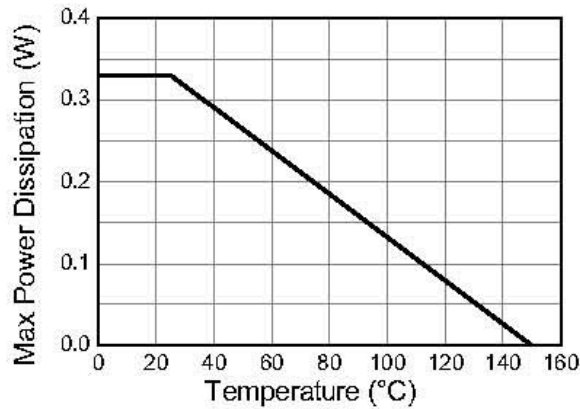
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage at $I_R = 200 \mu\text{A}$	$V_{(BR)R}$	10	-	-	V
Forward Voltage at $I_F = 10 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 1 \text{ A}$	V_F	- - -	- - -	0.3 0.38 0.58	V
Reverse Current at $V_R = 5 \text{ V}$ at $V_R = 8 \text{ V}$ at $V_R = 10 \text{ V}$ at $V_R = 8 \text{ V}, T_a = 85^\circ\text{C}$	I_R	- - - -	- - - -	4 5 6 200	μA
Diode Capacitance at $V_R = 10 \text{ V}, f = 1 \text{ MHz}$	C_D	-	37	-	pF

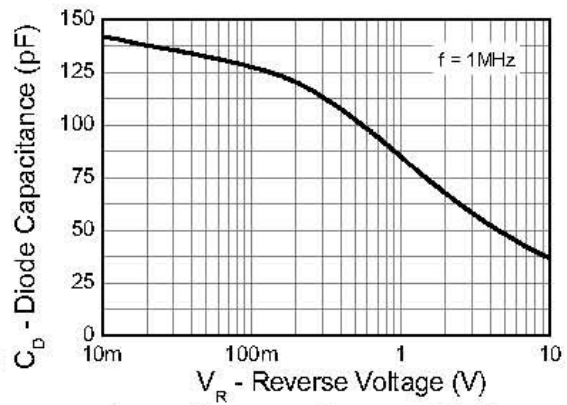
TOP DYNAMIC



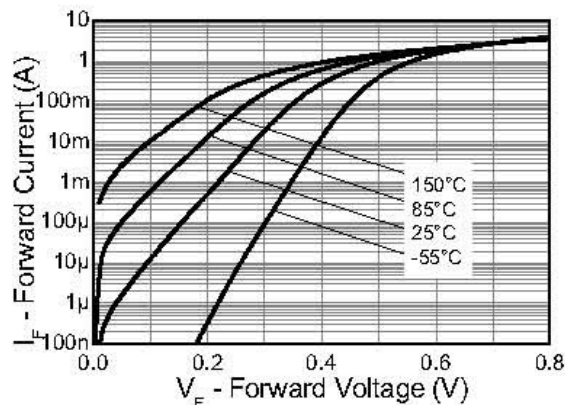
Dated: 10/07/2015 Rev: 03



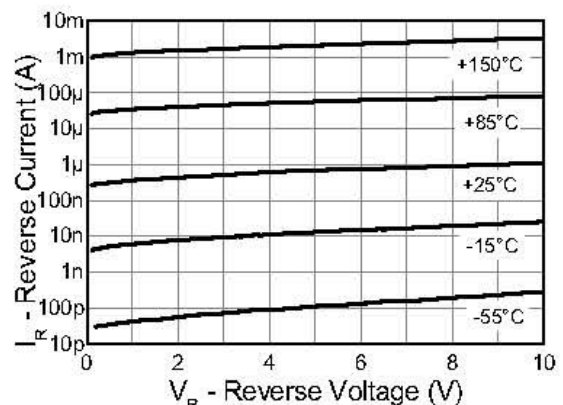
Derating Curve



Capacitance vs Reverse Voltage



Typical Forward Characteristics



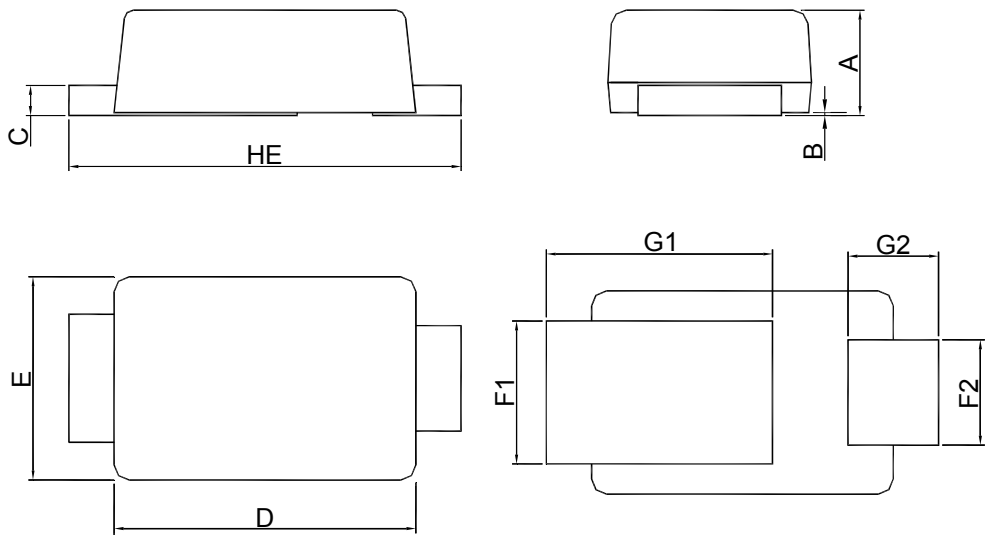
Typical Reverse Characteristics

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PACKAGE OUTLINE

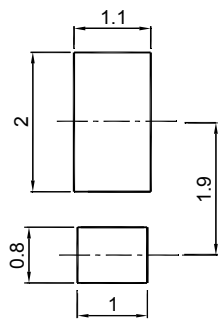
Plastic surface mounted package; 2 leads

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



SOD-323HE

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

TOP DYNAMIC

