

ZHCS400HS

SILICON HIGH CURRENT SCHOTTKY BARRIER DIODE

Features

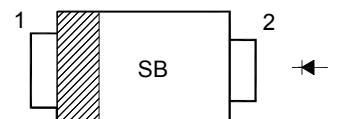
- Low V_F
- High current capability
- Miniature surface mount package

Applications

- DC-DC converters
- Mobile telecom

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: SB
Simplified outline SOD-323HE and symbol

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	40	V
Forward Current (Continuous)	I_F	400	mA
Average Peak Forward Current	I_{FAV}	1000	mA
Non-Repetitive Forward Current $t \leq 100 \mu\text{s}$ $t \leq 8.3 \text{ ms}$	I_{FSM}	6.75 25	A A
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

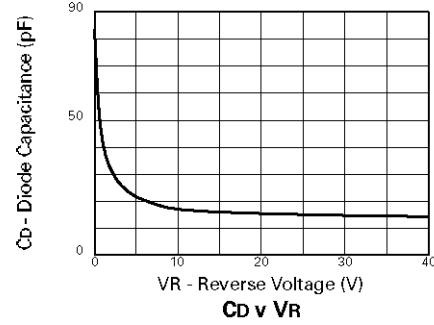
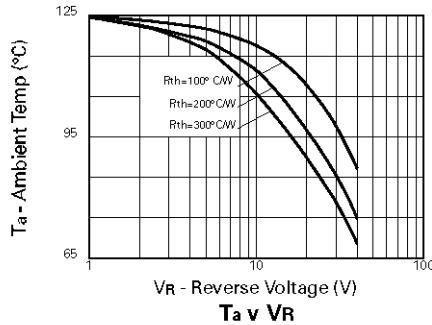
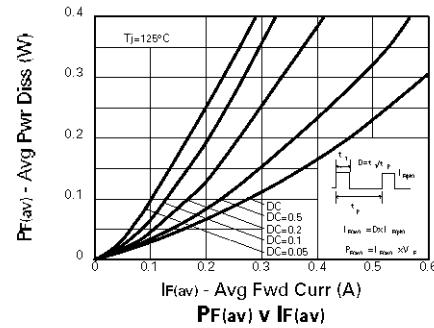
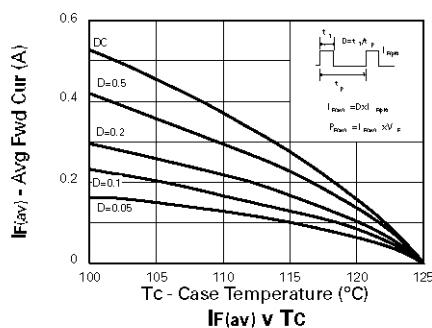
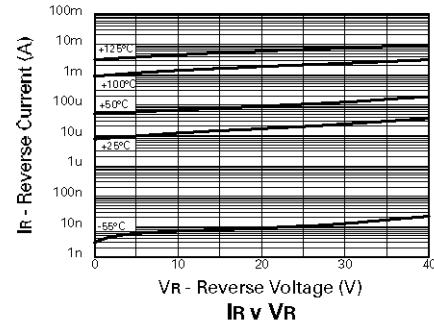
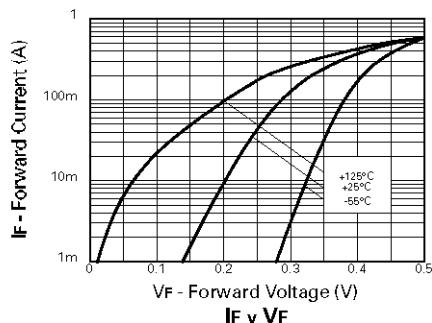
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 200 \mu\text{A}$	$V_{(BR)R}$	40	-	-	V
Forward Voltage at $I_F = 50 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 250 \text{ mA}$ at $I_F = 400 \text{ mA}$ at $I_F = 750 \text{ mA}$ at $I_F = 1000 \text{ mA}$ at $I_F = 1500 \text{ mA}$	V_F	- - - - - - -	- - - - - - -	300 350 460 500 670 780 1050	mV
Reverse Current at $V_R = 30 \text{ V}$	I_R	-	-	40	μA
Diode Capacitance at $V_R = 25 \text{ V}, f = 1 \text{ MHz}$	C_D	-	20	-	pF
Reverse Recovery Time Switched from $I_F = 500 \text{ mA}$ to $I_R = 500 \text{ mA}$, Measured at $I_R = 50 \text{ mA}$	t_{rr}	-	10	-	ns

TOP DYNAMIC



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TOP DYNAMIC

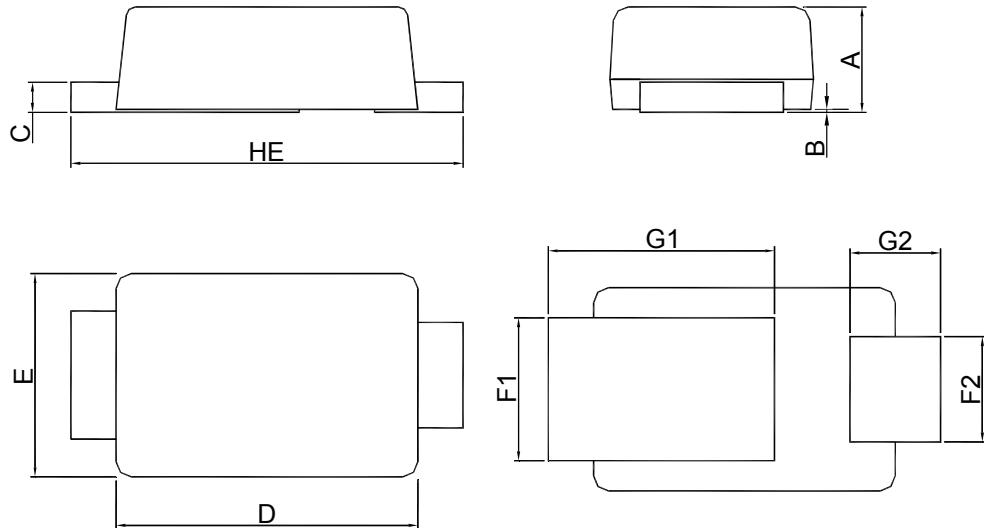


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PACKAGE OUTLINE

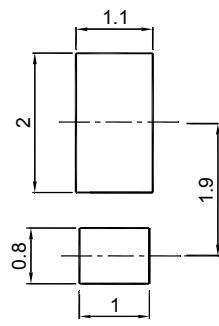
Plastic surface mounted package; 2 leads

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

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Dated :10/07/2015 Rev:03