

ZHCS400

SILICON HIGH CURRENT SCHOTTKY BARRIER DIODE

Features

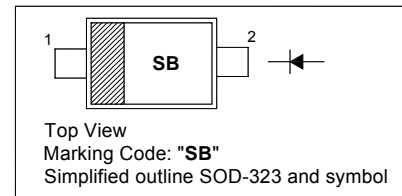
- Low V_F
- High current capability
- Miniature surface mount package

Applications

- DC-DC converters
- Mobile telecom

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

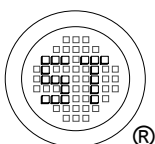


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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 $t \leq 100\text{ }\mu\text{s}$ $t \leq 10\text{ ms}$	I_{FSM}	6.75 3	A A
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 200\text{ }\mu\text{A}$	$V_{(BR)R}$	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



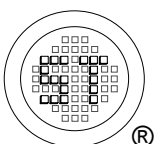
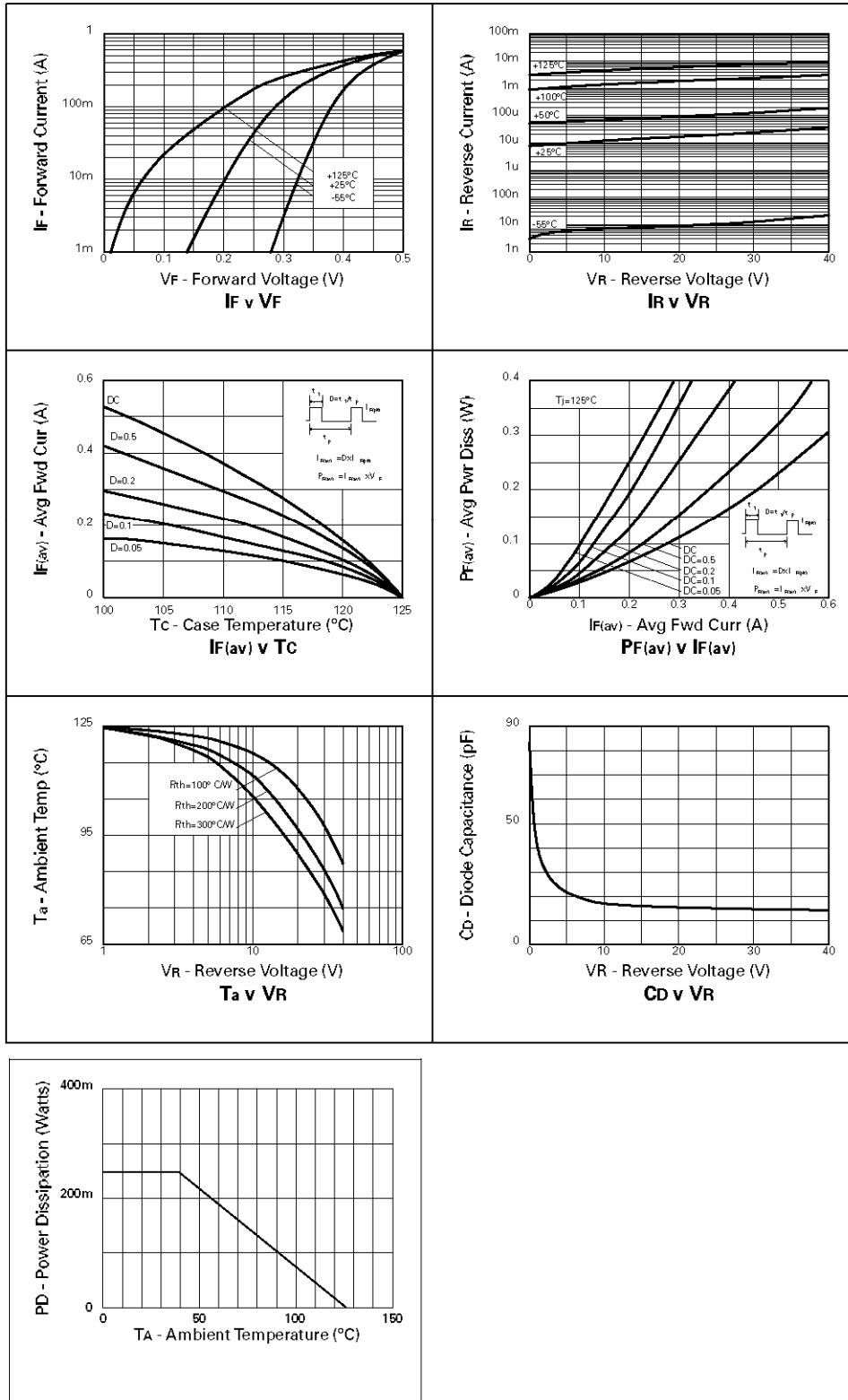
SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
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ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0506098

Dated : 01/09/2006



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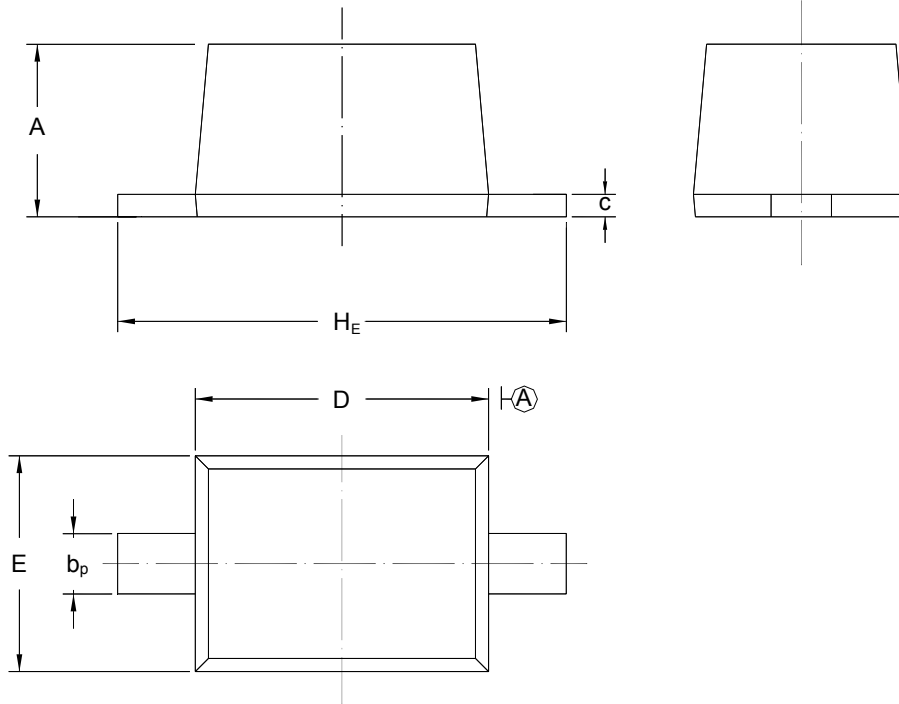
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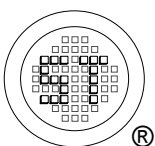
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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