

ZHCS400

SOD323 SILICON HIGH CURRENT SCHOTTKY BARRIER DIODE
"SuperBAT"

FEATURES

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

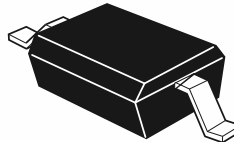
APPLICATIONS

- DC - DC converters
- Mobile telecomms
- PCMCIA

DEVICE MARKING

- Partmark detail - BD

SOD323



PINOUT - TOP VIEW



Partmark is for example only

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	40	V
Forward Current (Continuous)	I_F	400	mA
Forward Voltage @ $I_F = 400\text{mA}$	V_F	500	mV
Average Peak Forward Current; D.C. = 50%	I_{FAV}	1000	mA
Non Repetitive Forward Current	I_{FSM}	6.75	A
$t \leq 100\mu\text{s}$ $t \leq 10\text{ms}$		3	A
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	250	mW
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Junction Temperature	T_j	125	$^\circ\text{C}$

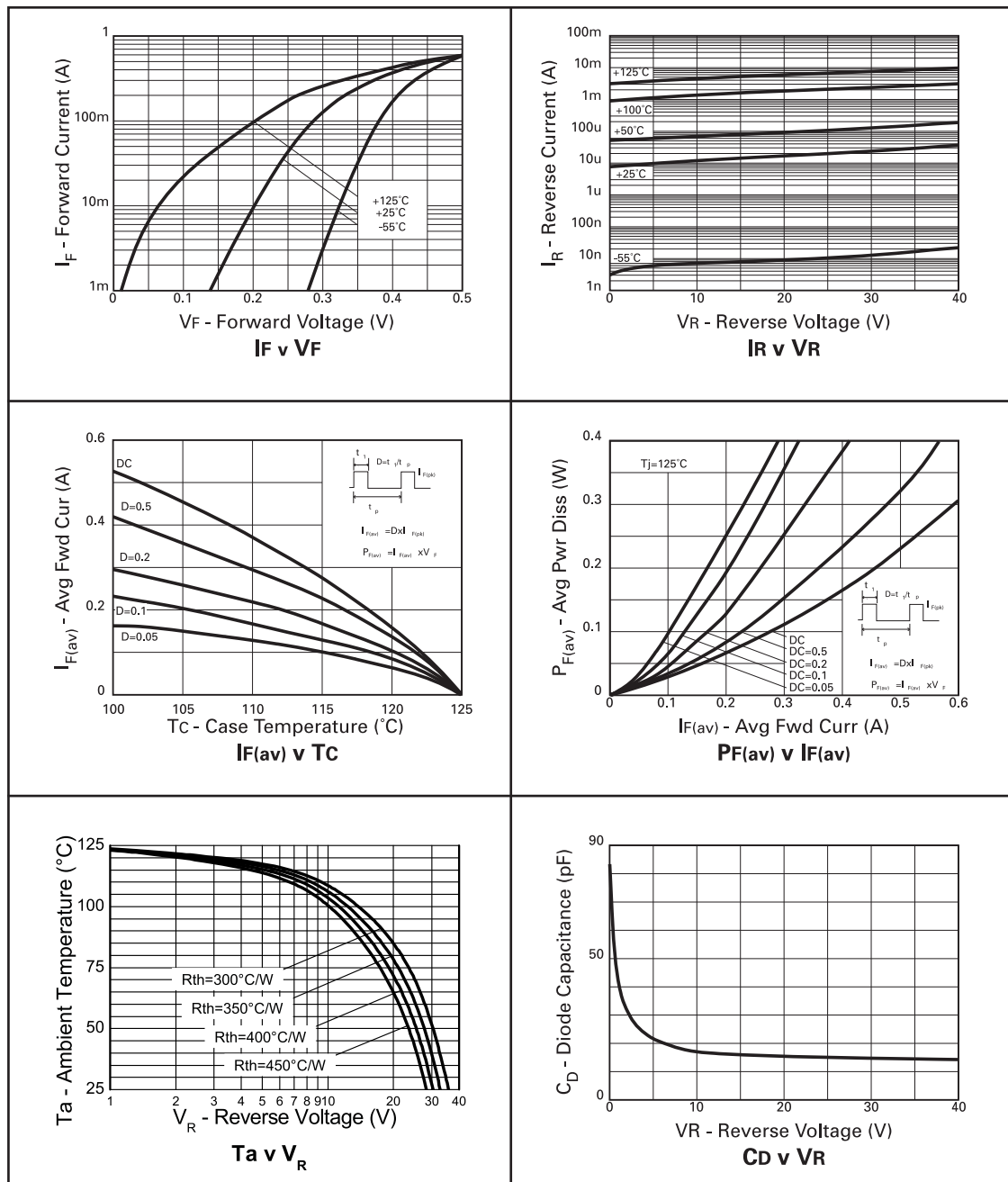
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
Reverse Breakdown Voltage	$V_{(BR)R}$	40	60		V	$I_R = 200\mu\text{A}$
Forward Voltage	V_F		270 300 370 425 550 640 810 440	300 350 460 500 670 780 1050	mV mV mV mV mV mV mV mV	$I_F = 50\text{mA}$ $I_F = 100\text{mA}$ $I_F = 250\text{mA}$ $I_F = 400\text{mA}$ $I_F = 750\text{mA}$ $I_F = 1000\text{mA}$ $I_F = 1500\text{mA}$ $I_F = 500\text{mA}, T_{amb} = 100^\circ\text{C}$
Reverse Current	I_R		15	40	μA	$V_R = 30\text{V}$
Diode Capacitance	C_D		20		pF	$f = 1\text{MHz}, V_R = 25\text{V}$
Reverse Recovery Time	t_{rr}		10		ns	switched from $I_F = 500\text{mA}$ to $I_R = 500\text{mA}$ Measured at $I_R = 50\text{mA}$

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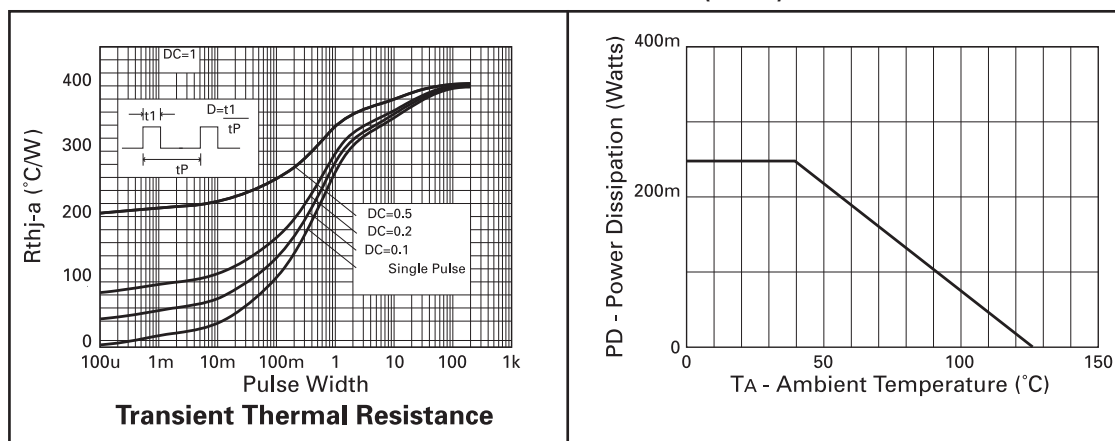
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TYPICAL CHARACTERISTICS



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TYPICAL CHARACTERISTICS (Cont.)



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NOTES:

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Definitions

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Product status key:

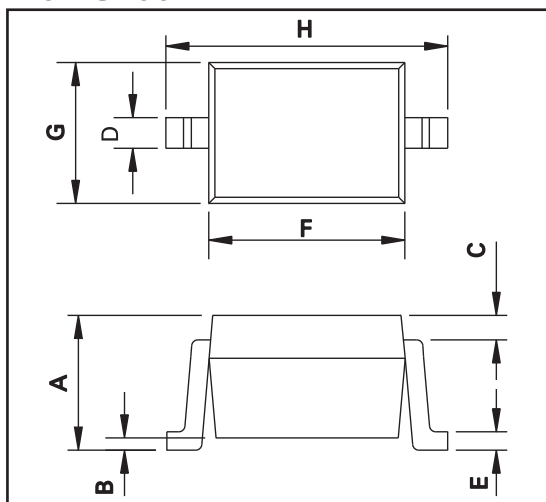
"Preview"Future device intended for production at some point. Samples may be available
"Active"Product status recommended for new designs
"Last time buy (LTB)"Device will be discontinued and last time buy period and delivery is in effect
"Not recommended for new designs"Device is still in production to support existing designs and production
"Obsolete"Production has been discontinued

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PACKAGE OUTLINE



PACKAGE DIMENSIONS

DIM	Millimeters		DIM	Millimeters	
	Min	Max		Min	Max
A	0.91	1.16	E	0.127	0.2
B	-	0.1	F	1.52	1.77
C	-	-	G	1.11	1.37
D	0.33	0.4	H	2.46	2.71

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