

SOD323 SILICON HIGH CURRENT
SCHOTTKY BARRIER DIODE “SuperBAT”

ZHCS400

ISSUE 1- NOVEMBER 1998

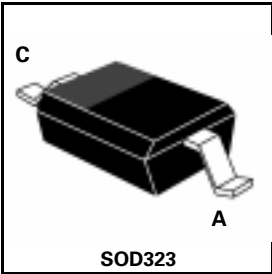
FEATURES:

- Low V_F
- High Current Capability
- Miniature Surface Mount Package

APPLICATIONS:

- DC - DC converters
- Mobile telecomms
- PCMCIA

Partmark Detail - BD



ABSOLUTE MAXIMUM RATINGS.

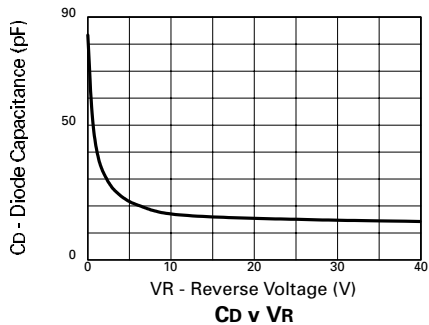
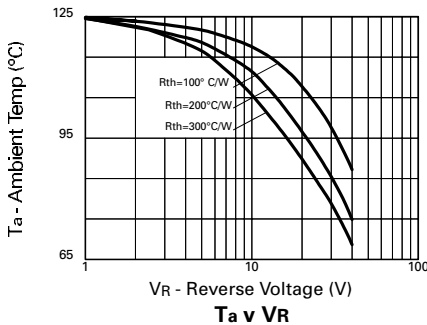
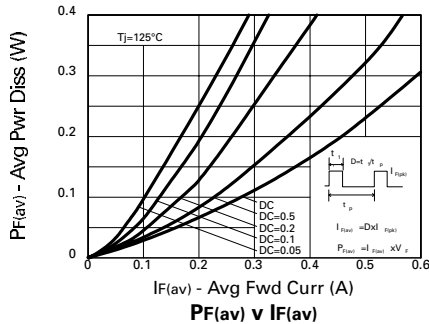
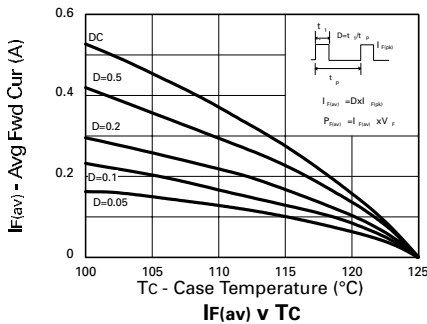
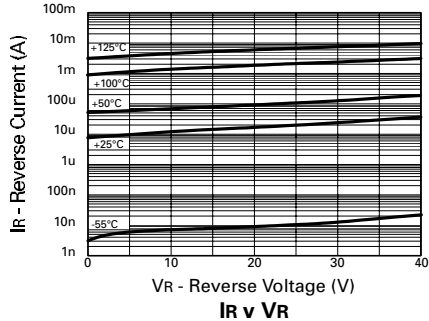
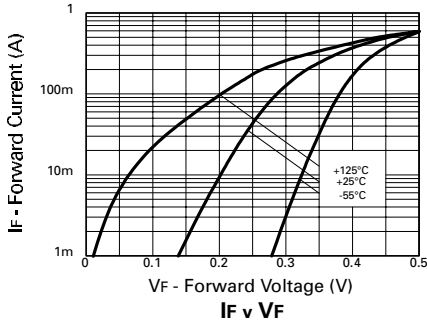
PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	40	V
Forward Current (Continuous)	I_F	400	mA
Forward Voltage @ $I_F=400\text{mA}$	V_F	500	mV
Average Peak Forward Current; D.C. = 50%	I_{FAV}	1000	mA
Non Repetitive Forward Current $t \leq 100\mu\text{s}$ $t \leq 10\text{ms}$	I_{FSM}	6.75 3	A 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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TYPICAL CHARACTERISTICS



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