ZHCS400

SOD323 SILICON HIGH CURRENT SCHOTTKY BARRIER DIODE "SuperBAT"

FEATURES

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

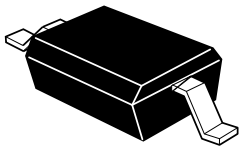
APPLICATIONS

- DC - DC converters
- Mobile telecomms
- PCMCIA

DEVICE MARKING

- Partmark detail - BD

SOD323



PINOUT - TOP VIEW



Partmark is for example only

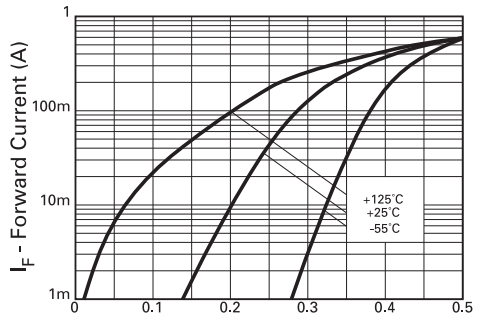
ABSOLUTE MAXIMUM RATINGS

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

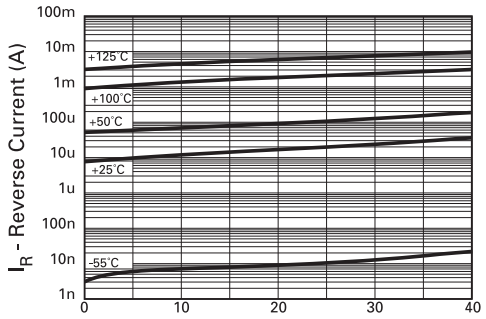
ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
Reverse Breakdown Voltage	$V_{(BR)R}$	40	60		V	I_R=200μA
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=50mA I_F=100mA I_F=250mA I_F=400mA I_F=750mA I_F=1000mA I_F=1500mA I_F=500mA, T_{amb}=100°C
Reverse Current	I_R		15	40	μA	V_R=30V
Diode Capacitance	C_D		20		pF	f=1MHz,V_R=25V

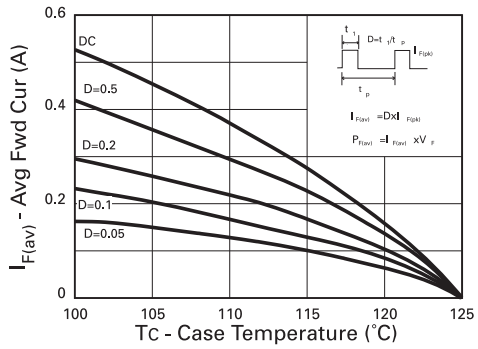
TYPICAL CHARACTERISTICS



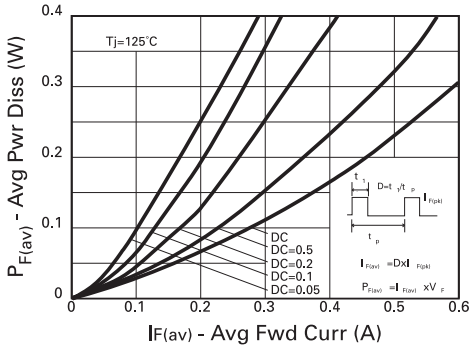
IF v VF



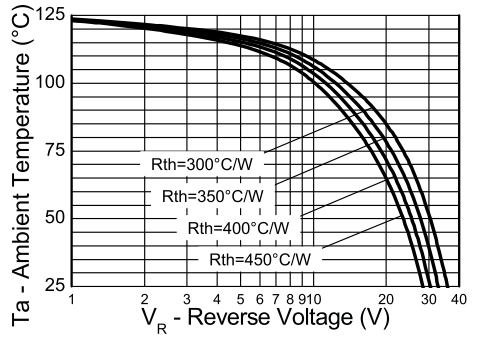
IR v VR



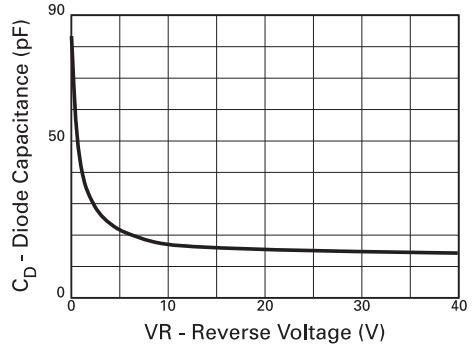
IF(av) v TC



PF(av) v IF(av)

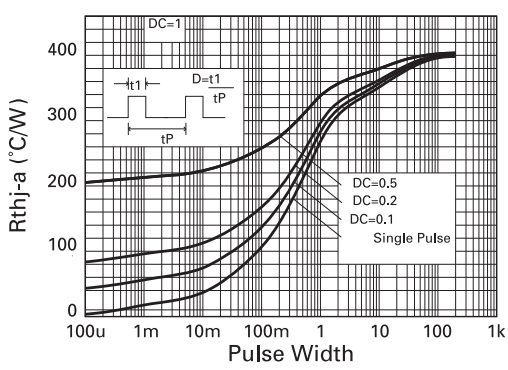


Ta v VR

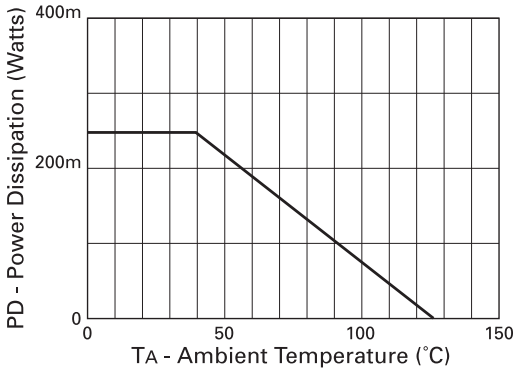


CD v VR

TYPICAL CHARACTERISTICS (Cont.)



Transient Thermal Resistance



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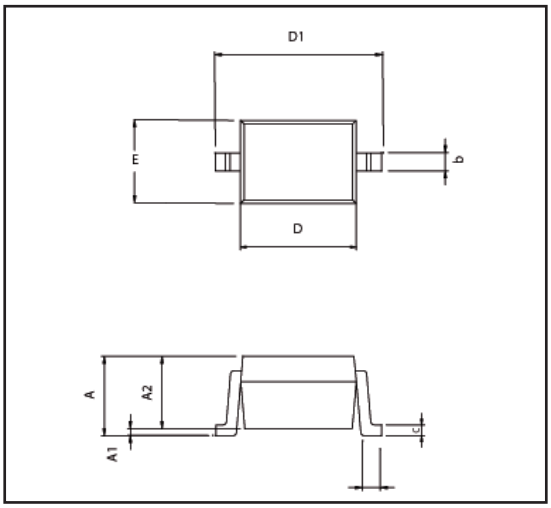
PACKAGE OUTLINE



PACKAGE DIMENSIONS

DIM	Millimeters		DIM	Millimeters	
	Min	Max		Min	Max
A	-	1.150	D	1.520	1.800
A1	0.000	0.100	D1	2.300	2.700
A2	0.800	-	E	1.150	1.450
b	0.250	0.400	L	0.100	0.400
c	0.080	0.200	-	-	-

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