BZT52C2V0S THRU BZT52C47S

SOD-323 BZT52CXX稳压管系列

Features

- Total power dissipation: Max. 200mW
- Wide zener reverse voltage range 2.0 V to 47V
- Small plastic package suitable for surface mounted design
- 5% high-precision regulated voltage stability
- High reliability chip and packaging process

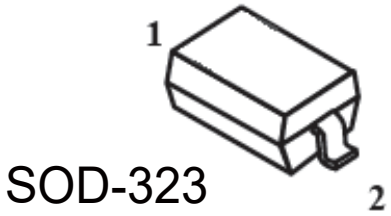


SOD-323

Applications

Low-power voltage regulator is mainly used for circuit voltage adjustment of mobile phones, hand-held devices and high-density computer motherboards.

Schematic diagram of package die

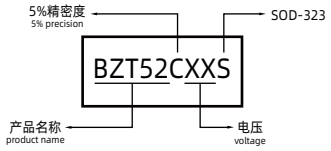




Schematic diagram of package die

Parameter	Symbol	Value	Value
Power Dissipation	P_D	200	mW
Forward Voltage at IF = 10 mA	V_F	0.9	V
Typical thermal resistance juncting to ambient (1)	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_J,T_{stg}	-55 ~ +150	°C

Ordering information

Product ID	Pack	Naming rule	voltage	Qty(PCS)
BZT52CXXS	SOD-323		2V-47V	3000

Electrical Characteristics (T_A=25℃, unless otherwise noted)

Type	Marking	Zener Voltage Range (2)				Maximum Zener (3) mpedance			Reverse Current (2)		Typical temperature coefficient @I_{ZTC} mV/°C		Test current I_{ZTC}
		V_{ZT}（at I_{ZT}）			I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}	I_{ZK}	I_R	@V_R			
		Min（V）	Nom（V）	Max（V）	(mA)	(Ω)		(mA)	μA	V	MIN	MAX	mA
BZT52C2V0S	WY	1.91	2.0	2.09	5	100	600	1	150	1.0	-3.5	0	5
BZT52C2V4S	WX	2.2	2.4	2.6	5	100	600	1	50	1.0	-3.5	0	5
BZT52C2V7S	W1	2.5	2.7	2.9	5	100	600	1	20	1.0	-3.5	0	5
BZT52C3V0S	W2	2.8	3.0	3.2	5	95	600	1	10	1.0	-3.5	0	5
BZT52C3V3S	W3	3.1	3.3	3.5	5	95	600	1	5.0	1.0	-3.5	0	5
BZT52C3V6S	W4	3.4	3.6	3.8	5	90	600	1	5.0	1.0	-3.5	0	5
BZT52C3V9S	W5	3.7	3.9	4.1	5	90	600	1	3.0	1.0	-3.5	0	5
BZT52C4V3S	W6	4.0	4.3	4.6	5	90	600	1	3.0	1.0	-3.5	0	5
BZT52C4V7S	W7	4.4	4.7	5.0	5	80	500	1	3.0	2.0	-3.5	0.2	5
BZT52C5V1S	W8	4.8	5.1	5.4	5	60	480	1	2.0	2.0	-2.7	1.2	5
BZT52C5V6S	W9	5.2	5.6	6.0	5	40	400	1	1.0	2.0	-2	2.5	5
BZT52C6V2S	WA	5.8	6.2	6.6	5	10	150	1	3.0	4.0	0.4	3.7	5
BZT52C6V8S	WB	6.4	6.8	7.2	5	15	80	1	2.0	4.0	1.2	4.5	5
BZT52C7V5S	WC	7.0	7.5	7.9	5	15	80	1	1.0	5.0	2.5	5.3	5
BZT52C8V2S	WD	7.7	8.2	8.7	5	15	80	1	0.7	5.0	3.2	6.2	5
BZT52C9V1S	WE	8.5	9.1	9.6	5	15	100	1	0.5	6.0	3.8	7.0	5
BZT52C10S	WF	9.4	10	10.6	5	20	150	1	0.2	7.0	4.5	8.0	5
BZT52C11S	WG	10.4	11	11.6	5	20	150	1	0.1	8.0	5.4	9.0	5
BZT52C12S	WH	11.4	12	12.7	5	25	150	1	0.1	8.0	6.0	10.0	5
BZT52C13S	WI	12.4	13	14.1	5	30	170	1	0.1	8.0	7.0	11.0	5
BZT52C15S	WJ	13.8	15	15.6	5	30	200	1	0.1	10.5	9.2	13.0	5
BZT52C16S	WK	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14.0	5
BZT52C18S	WL	16.8	18	19.1	5	45	225	1	0.1	12.6	12.4	16.0	5
BZT52C20S	WM	18.8	20	21.2	5	55	225	11	0.1	14.0	14.4	18.0	5
BZT52C22S	WN	20.8	22	23.3	5	55	250	1	0.1	15.4	16.4	20.0	5
BZT52C24S	WO	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22.0	5
BZT52C27S	WP	25.1	27	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
BZT52C30S	WQ	28.0	30	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2
BZT52C33S	WR	31.0	33	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2
BZT52C36S	WS	34.0	36	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2
BZT52C39S	WT	37.0	39	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2
BZT52C43S	WU	40.0	43	46.0	2.5	130	500	1	2	33	37.6	46.6	2.5
BZT52C47S	WV	44.0	47	50.0	2.5	150	500	1	2	36	42.0	51.8	2.5

NOTES:

（1）f=1KHz

（2）Short duration test pulse used to minimize self-heating effect.

（3）VZT is tested with pulses 20ms.

Typical Characteristics

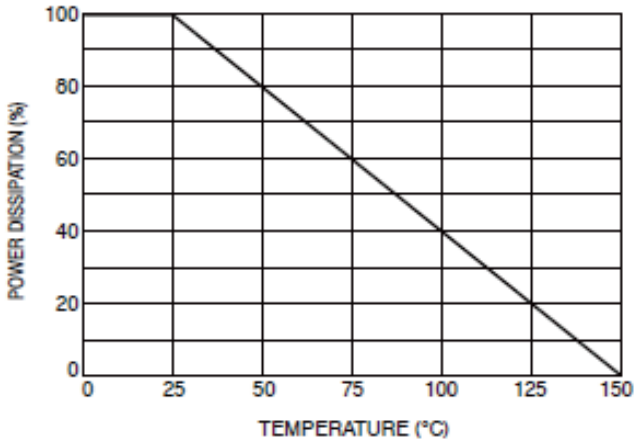


Fig.1 Maximum continuous power loss

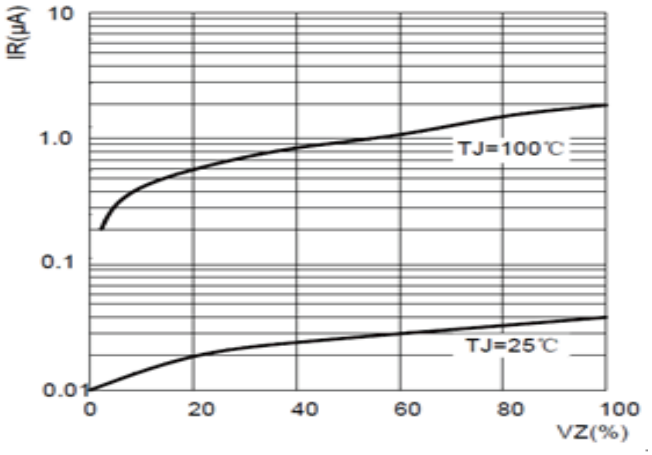


Fig.2 Typical reverse characteristic

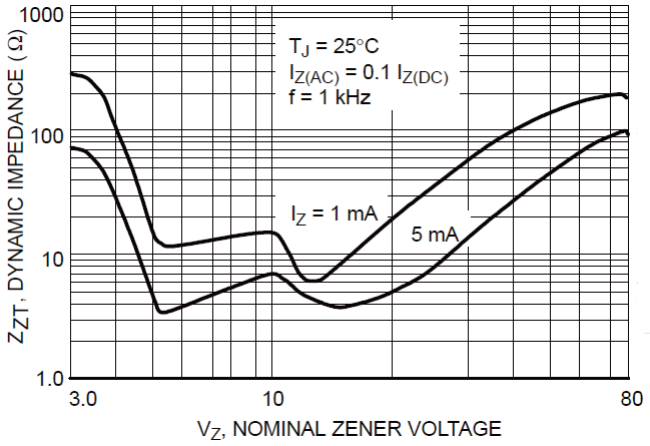


Fig.3 Reverse voltage and impedance characteristic curve

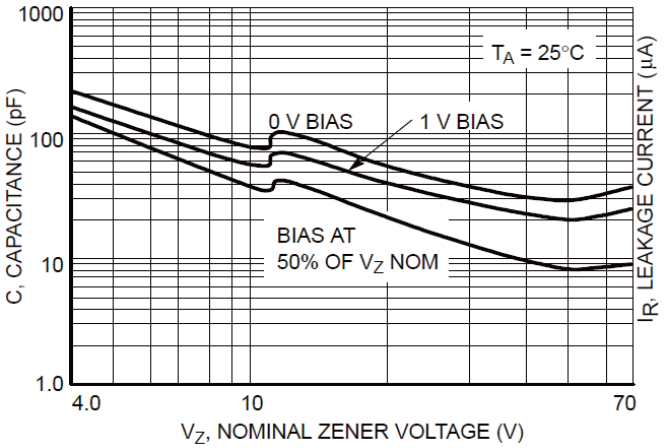
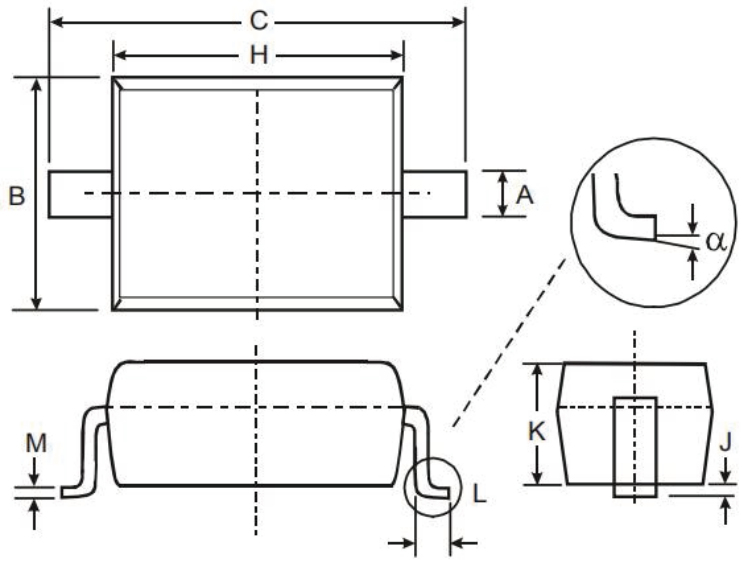


Fig.4 Typical capacitance characteristic curve

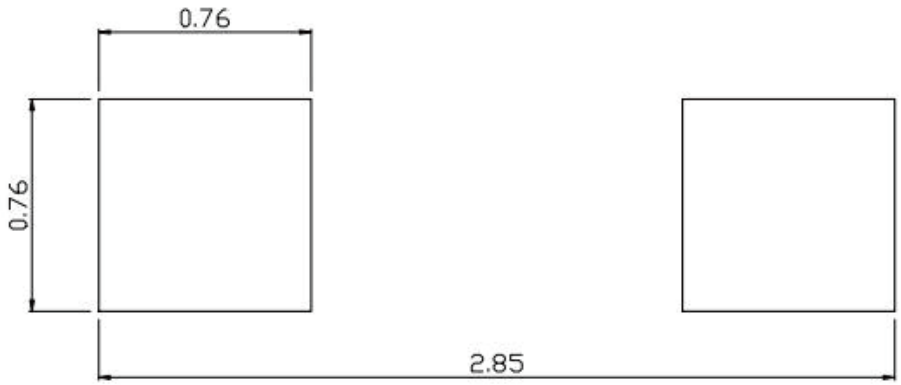
Package Outline Dimensions

SOD323



SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.25	0.35
B	1.20	1.40
C	2.40	2.70
H	1.60	1.80
J	0.01	0.15
K	0.80	1.00
L	0.20	0.40
M	0.08	0.15
α	0°	8°

Soldering Footprint (mm)



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BZX84C5V6 DTC114YUA MMSZ5240B MMSZ5243B BZT52B10S 2SK3541 BZT52C8V2 MMSZ5252B BZT52C2V7 DTC123YCA S9014 2SC1623W BAV70W MMSZ5239B SM712 BAV23A BZT52C8V2S DTC143ECA B16WS BAS21S BZT52B16 BZT52C15S MMSZ5245B BAS40-05 BZT52B2V4 BZT52C27S MMBD4148SE RB520S-30 78M05 BSS138