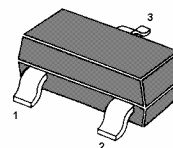
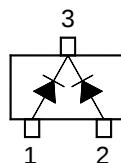


BZX84C...CC Series

ZENER VOLTAGE REGULATORS

This series of Zener diodes is offered in the convenient, surface mount plastic SOT-23 package. These devices are designed to provide voltage regulation with minimum space requirement. They are well suited for applications such as cellular phones, hand held portables, and high density PC boards.



1. Anode 2. Anode 3. Cathode
SOT-23 Plastic Package

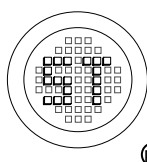
Features

- Zener breakdown voltage range – 2.4 V to 75 V
- Package designed for optimal automated board assembly
- Small package size for high density applications

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

Parameter	Symbol	Value	Unit
Total Power Dissipation	P_D	350	mW
Thermal Resistance, Junction to Ambient ¹⁾	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_j, T_s	- 65 to + 150	$^\circ\text{C}$

¹⁾ Alumina = 0.4 X 0.3 X 0.024 in, 99.5% alumina



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 21/06/2006

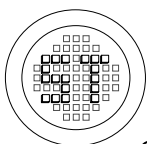
BZX84C...CC Series

Electrical Characteristics ($T_a = 25\text{ }^{\circ}\text{C}$ unless otherwise noted, $V_F < 0.9\text{ V}$ at $I_F = 10\text{ mA}$)

Type	Marking Code	$V_{Z1}\text{ (V)}$ @ $I_{ZT1} = 5\text{ mA}$ ¹⁾			Z_{ZT1} (Ohms) @ $I_{ZT1} = 5\text{ mA}$	$V_{Z2}\text{ (V)}$ @ $I_{ZT2} = 1\text{ mA}$ ¹⁾		Z_{ZT2} (Ohms) @ $I_{ZT2} = 1\text{ mA}$ ²⁾	$V_{Z3}\text{ (V)}$ @ $I_{ZT3} = 20\text{ mA}$ ¹⁾		Z_{ZT3} (Ohms) @ $I_{ZT3} = 20\text{ mA}$	Max Reverse Leakage Current		$\gamma_{VZ}\text{ (mV/k)}$ @ $I_{ZT1} = 5\text{ mA}$		C(pF) @ $V_R = 0$ f=1MHz
		Min	Nom	Max		Min	Max		Min	Max		I_R μA	V_R V	Min	Max	
BZX84C2V4CC	JH	2.2	2.4	2.6	100	1.7	2.1	600	2.6	3.2	50	50	1	-3.5	0	450
BZX84C2V7CC	JJ	2.5	2.7	2.9	100	1.9	2.4	600	3	3.6	50	20	1	-3.5	0	450
BZX84C3V0CC	JK	2.8	3	3.2	95	2.1	2.7	600	3.3	3.9	50	10	1	-3.5	0	450
BZX84C3V3CC	JM	3.1	3.3	3.5	95	2.3	2.9	600	3.6	4.2	40	5	1	-3.5	0	450
BZX84C3V6CC	JN	3.4	3.6	3.8	90	2.7	3.3	600	3.9	4.5	40	5	1	-3.5	0	450
BZX84C3V9CC	JP	3.7	3.9	4.1	90	2.9	3.5	600	4.1	4.7	30	3	1	-3.5	-2.5	450
BZX84C4V3CC	JR	4	4.3	4.6	90	3.3	4	600	4.4	5.1	30	3	1	-3.5	0	450
BZX84C4V7CC	JX	4.4	4.7	5	80	3.7	4.7	500	4.5	5.4	15	3	2	-3.5	0.2	260
BZX84C5V1CC	JY	4.8	5.1	5.4	60	4.2	5.3	480	5	5.9	15	2	2	-2.7	1.2	225
BZX84C5V6CC	JZ	5.2	5.6	6	40	4.8	6	400	5.2	6.3	10	1	2	-2.0	2.5	200
BZX84C6V2CC	KA	5.8	6.2	6.6	10	5.6	6.6	150	5.8	6.8	6	3	4	0.4	3.7	185
BZX84C6V8CC	KB	6.4	6.8	7.2	15	6.3	7.2	80	6.4	7.4	6	2	4	1.2	4.5	155
BZX84C7V5CC	KC	7	7.5	7.9	15	6.9	7.9	80	7	8	6	1	5	2.5	5.3	140
BZX84C8V2CC	KD	7.7	8.2	8.7	15	7.6	8.7	80	7.7	8.8	6	0.7	5	3.2	6.2	135
BZX84C9V1CC	KE	8.5	9.1	9.6	15	8.4	9.6	100	8.5	9.7	8	0.5	6	3.8	7.0	130
BZX84C10CC	KF	9.4	10	10.6	20	9.3	10.6	150	9.4	10.7	10	0.2	7	4.5	8.0	130
BZX84C11CC	KH	10.4	11	11.6	20	10.2	11.6	150	10.4	11.8	10	0.1	8	5.4	9.0	130
BZX84C12CC	KJ	11.4	12	12.7	25	11.2	12.7	150	11.4	12.9	10	0.1	8	6.0	10.0	130
BZX84C13CC	KK	12.4	13	14.1	30	12.3	14	170	12.5	14.2	15	0.1	8	7.0	11.0	120
BZX84C15CC	KM	14.3	15	15.8	30	13.7	15.5	200	13.9	15.7	20	0.05	10.5	9.2	13.0	110
BZX84C16CC	KN	15.3	16	17.1	40	15.2	17	200	15.4	17.2	20	0.05	11.2	10.4	14.0	105
BZX84C18CC	KP	16.8	18	19.1	45	16.7	19	225	16.9	19.2	20	0.05	12.6	12.4	16.0	100
BZX84C20CC	KR	18.8	20	21.2	55	18.7	21.1	225	18.9	21.4	20	0.05	14	14.4	18.0	85
BZX84C22CC	KX	20.8	22	23.3	55	20.7	23.2	250	20.9	23.4	25	0.05	15.4	16.4	20.0	85
BZX84C24CC	KY	22.8	24	25.6	70	22.7	25.5	250	22.9	25.7	25	0.05	16.8	18.4	22.0	80
Type	Marking Code	$V_{Z1}\text{ Below}$ @ $I_{ZT1} = 2\text{ mA}$			$Z_{ZT1}\text{ Below}$ @ $I_{ZT1} = 2\text{ mA}$	$V_{Z2}\text{ Below}$ @ $I_{ZT2} = 0.1\text{ mA}$		$Z_{ZT2}\text{ Below}$ @ $I_{ZT2} = 0.5\text{ mA}$ ²⁾	$V_{Z3}\text{ Below}$ @ $I_{ZT3} = 10\text{ mA}$		$Z_{ZT3}\text{ Below}$ @ $I_{ZT3} = 10\text{ mA}$	Max Reverse Leakage Current		$\gamma_{VZ}\text{ (mV/k) Below}$ @ $I_{ZT1} = 2\text{ mA}$		C(pF) @ $V_R = 0$ f=1MHz
		Min	Nom	Max		Min	Max		Min	Max		I_R μA	V_R V	Min	Max	
BZX84C27CC	KZ	25.1	27	28.9	80	25	28.9	300	25.2	29.3	45	0.05	18.9	21.4	25.3	70
BZX84C30CC	MA	28	30	32	80	27.8	32	300	28.1	32.4	50	0.05	21	24.4	29.4	70
BZX84C33CC	MB	31	33	35	80	30.8	35	325	31.1	35.4	55	0.05	23.1	27.4	33.4	70
BZX84C36CC	MC	34	36	38	90	33.8	38	350	34.1	38.4	60	0.05	25.2	30.4	37.4	70
BZX84C39CC	MD	37	39	41	130	36.7	41	350	37.1	41.5	70	0.05	27.3	33.4	41.2	45
BZX84C43CC	ME	40	43	46	150	39.7	46	375	40.1	46.5	80	0.05	30.1	37.6	46.6	40
BZX84C47CC	MF	44	47	50	170	43.7	50	375	44.1	50.5	90	0.05	32.9	42.0	51.8	40
BZX84C51CC	MH	48	51	54	180	47.6	54	400	48.1	54.6	100	0.05	35.7	46.6	57.2	40
BZX84C56CC	MJ	52	56	60	200	51.5	60	425	52.1	60.8	110	0.05	39.2	52.2	63.8	40
BZX84C62CC	MK	58	62	66	215	57.4	66	450	58.2	67	120	0.05	43.4	58.8	71.6	35
BZX84C68CC	MM	64	68	72	240	63.4	72	475	64.2	73.2	130	0.05	47.6	65.6	79.8	35
BZX84C75CC	MN	70	75	79	255	69.4	79	500	70.3	80.2	140	0.05	52.5	73.4	88.6	35

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

²⁾ The Zener impedance, Z_{ZT2} , for the 27 through 75 volt types is tested at 0.5 mA rather than the test current of 0.1 mA used for V_{Z2}



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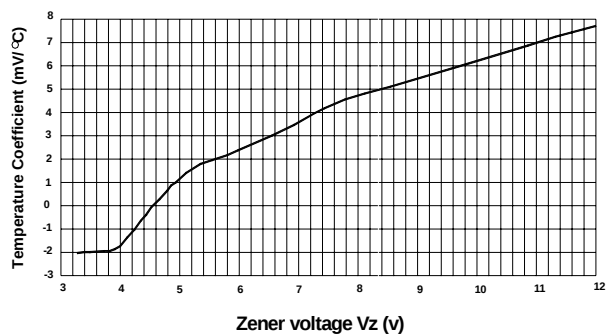


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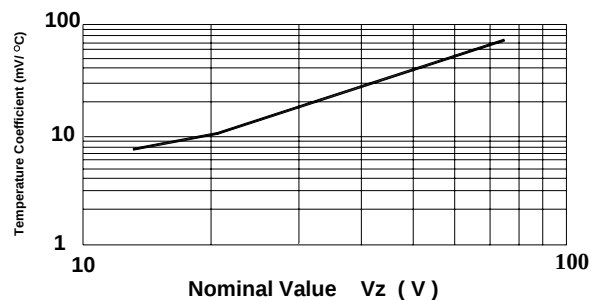
Dated : 21/06/2006

BZX84C...CC Series

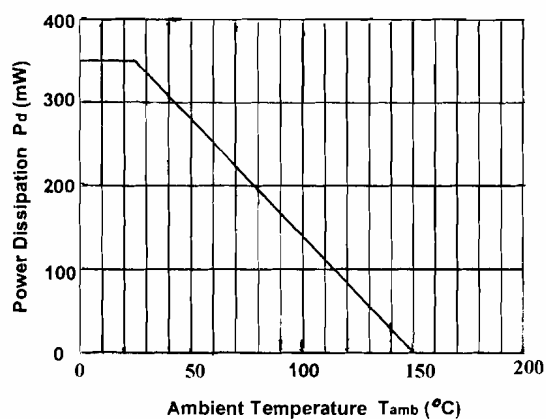
Temperature Coefficient



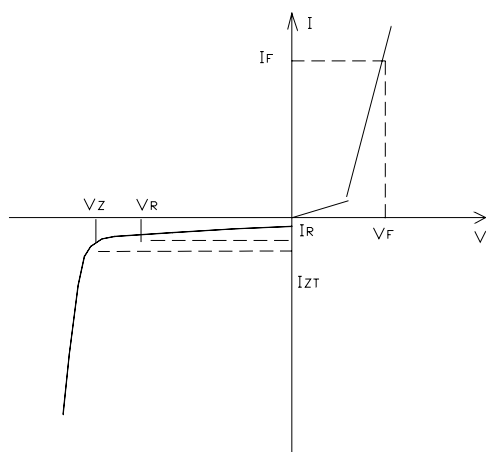
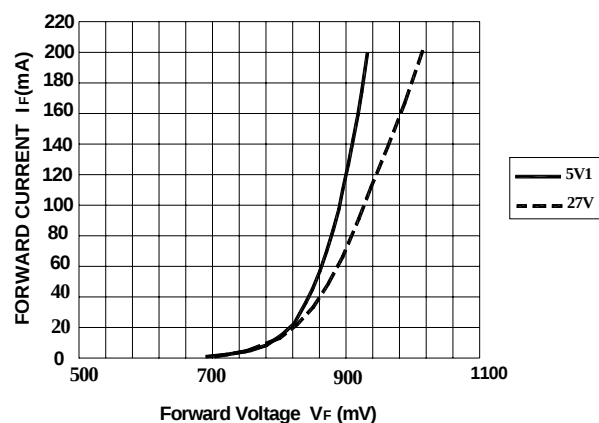
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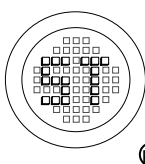
Power Derating Curve



Typical Forward Voltage

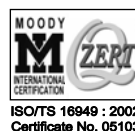


Zener Voltage Regulator



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