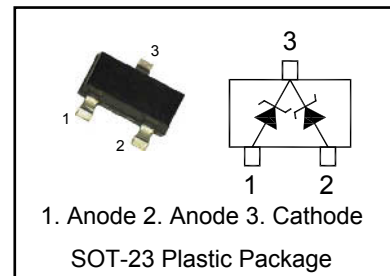


SILICON PLANAR ZENER DIODES

BZX84C...CCH Series

Halogen-free type

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.



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
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

BZX84C...CCH Series

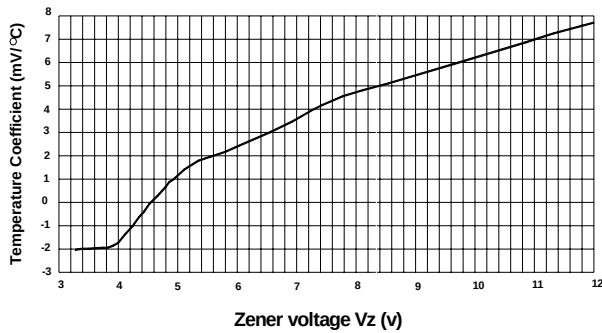
Electrical Characteristics ($T_a = 25\text{ }^{\circ}\text{C}$ unless otherwise noted, $V_F < 0.9\text{ V}$ at $I_F = 10\text{ mA}$)

Type	Marking Code	Zener Voltage Range ¹⁾				Dynamic Resistance	Reverse Leakage Current	
		Min.	Nom.	Max.	I_{ZT} (mA)	Z_{ZT} Max. (Ω)	I_R Max. (μA)	at V_R (V)
BZX84C2V4CCH	JH	2.2	2.4	2.6	5	100	50	1
BZX84C2V7CCH	JJ	2.5	2.7	2.9	5	100	20	1
BZX84C3V0CCH	JK	2.8	3	3.2	5	95	10	1
BZX84C3V3CCH	JM	3.1	3.3	3.5	5	95	5	1
BZX84C3V6CCH	JN	3.4	3.6	3.8	5	90	5	1
BZX84C3V9CCH	JP	3.7	3.9	4.1	5	90	3	1
BZX84C4V3CCH	JR	4	4.3	4.6	5	90	3	1
BZX84C4V7CCH	JX	4.4	4.7	5	5	80	3	2
BZX84C5V1CCH	JY	4.8	5.1	5.4	5	60	2	2
BZX84C5V6CCH	JZ	5.2	5.6	6	5	40	1	2
BZX84C6V2CCH	KA	5.8	6.2	6.6	5	10	3	4
BZX84C6V8CCH	KB	6.4	6.8	7.2	5	15	2	4
BZX84C7V5CCH	KC	7	7.5	7.9	5	15	1	5
BZX84C8V2CCH	KD	7.7	8.2	8.7	5	15	0.7	5
BZX84C9V1CCH	KE	8.5	9.1	9.6	5	15	0.5	6
BZX84C10CCH	KF	9.4	10	10.6	5	20	0.2	7
BZX84C11CCH	KH	10.4	11	11.6	5	20	0.1	8
BZX84C12CCH	KJ	11.4	12	12.7	5	25	0.1	8
BZX84C13CCH	KK	12.4	13	14.1	5	30	0.1	8
BZX84C15CCH	KM	14.3	15	15.8	5	30	0.05	10.5
BZX84C16CCH	KN	15.3	16	17.1	5	40	0.05	11.2
BZX84C18CCH	KP	16.8	18	19.1	5	45	0.05	12.6
BZX84C20CCH	KR	18.8	20	21.2	5	55	0.05	14
BZX84C22CCH	KX	20.8	22	23.3	5	55	0.05	15.4
BZX84C24CCH	KY	22.8	24	25.6	5	70	0.05	16.8
BZX84C27CCH	KZ	25.1	27	28.9	2	80	0.05	18.9
BZX84C30CCH	MA	28	30	32	2	80	0.05	21
BZX84C33CCH	MB	31	33	35	2	80	0.05	23.1
BZX84C36CCH	MC	34	36	38	2	90	0.05	25.2
BZX84C39CCH	MD	37	39	41	2	130	0.05	27.3
BZX84C43CCH	ME	40	43	46	2	150	0.05	30.1
BZX84C47CCH	MF	44	47	50	2	170	0.05	32.9
BZX84C51CCH	MH	48	51	54	2	180	0.05	35.7
BZX84C56CCH	MJ	52	56	60	2	200	0.05	39.2
BZX84C62CCH	MK	58	62	66	2	215	0.05	43.4
BZX84C68CCH	MM	64	68	72	2	240	0.05	47.6
BZX84C75CCH	MN	70	75	79	2	255	0.05	52.5

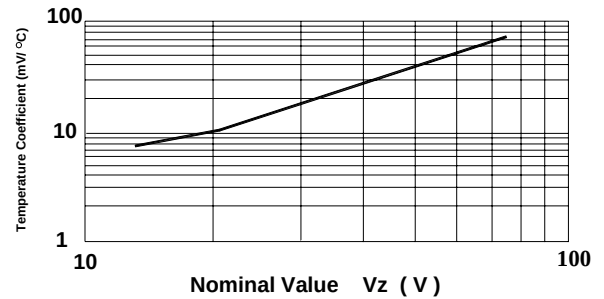
¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

BZX84C...CCH Series

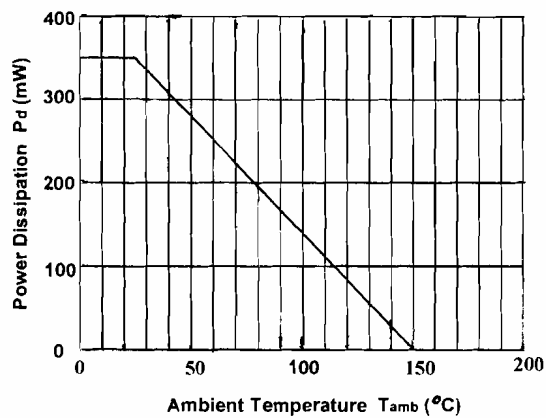
Temperature Coefficient



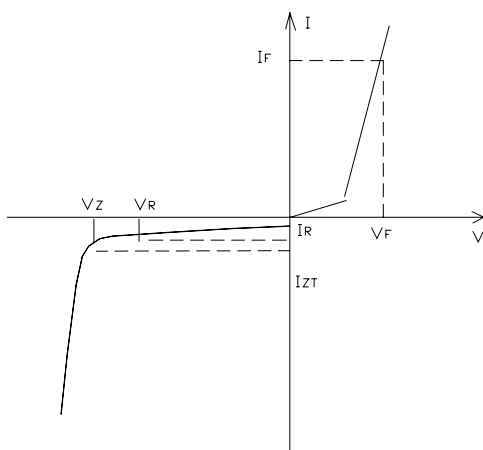
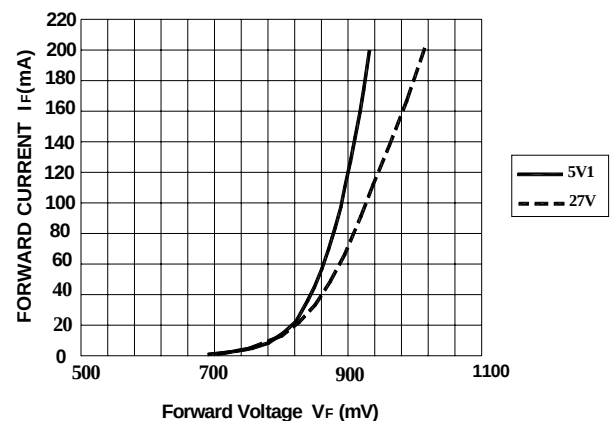
Temperature Coefficient



Power Derating Curve



Typical Forward Voltage



Zener Voltage Regulator