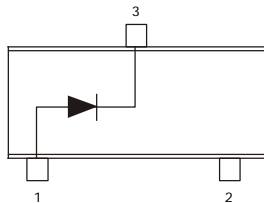
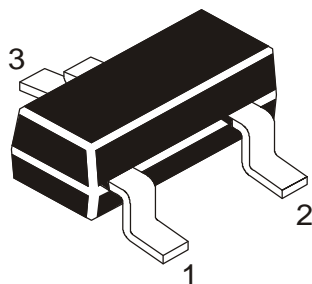


SILICON PLANAR VOLTAGE REGULATOR DIODES

BZX84C3V3 - 75V (SSV)



Pin Configuration
 1 = ANODE
 2 = NC
 3 = CATHODE

**SOT-23
 Formed SMD Package**

Suited for Applications such as Cellular Phones, Hand Held Portables, and High Density PC Boards

Polarity: - Cathode indicated by polarity band

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation on FR-5 Board Derated Above 25°C	*P _D	225	mW
Thermal Resistance, Junction to Ambient	R _{th(j-a)}	1.8	mW/°C
Power Dissipation on Alumina Substrate Derated Above 25°C	**P _D	300	mW
Thermal Resistance, Junction to Ambient	R _{th(j-a)}	2.4	mW/°C
Operating and Storage Junction Temperature Range	T _j , T _{stg}	417	°C/W
		- 65 to +150	°C

*FR-5=1.0X0.75X0.62 inches

**Alumina= 0.4X0.3X0.024 inches, 99.5% alumina

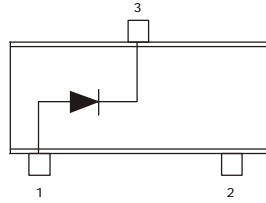
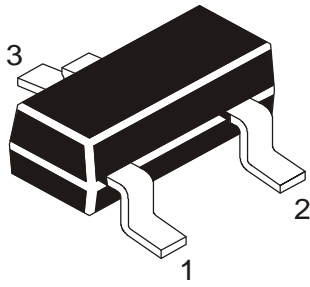
Forward Voltage at I_F=10mA <0.9V

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

Device	***V _{Z1} (V) @ I _{ZT1} =5mA		Z _{ZT1} (W) @ I _{ZT1} =5mA max	***V _{Z2} (V) @ I _{ZT2} =1mA		Z _{ZT2} (W) @ I _{ZT2} =1mA max	***V _{Z3} (V) @ I _{ZT3} =20mA		Z _{ZT3} (W) @ I _{ZT3} =20mA Max	Max Reverse Leakage Current I _R @ V _R (mA) (V)		QV _Z (mv/k) @ I _{ZT1} =5mA		C (pF) @ V _R =0 f=1MHz	Marking
	min	max		min	max		Min	Max		Max	Min	Max			
BZX84C3V3	3.1	3.5	95	2.3	2.9	600	3.6	4.2	40	5	1	-3.5	0	450	Z14
BZX84C3V6	3.4	3.8	90	2.7	3.3	600	3.9	4.5	40	5	1	-3.5	0	450	Z15
BZX84C3V9	3.7	4.1	90	2.9	3.5	600	4.1	4.7	30	3	1	-3.5	-2.5	450	Z16
BZX84C4V3	4.0	4.6	90	3.3	4.0	600	4.4	5.1	30	3	1	-3.5	0	450	W9
BZX84C4V7	4.4	5.0	80	3.7	4.7	500	4.5	5.4	15	3	2	-3.5	0.2	260	Z1
BZX84C5V1	4.8	5.4	60	4.2	5.3	480	5.0	5.9	15	2	2	-2.7	1.2	225	Z2
BZX84C5V6	5.2	6.0	40	4.8	6.0	400	5.2	6.3	10	1	2	-2.0	2.5	200	Z3
BZX84C6V2	5.8	6.6	10	5.6	6.6	150	5.8	6.8	6	3	4	0.4	3.7	185	Z4
BZX84C6V8	6.4	7.2	15	6.3	7.2	80	6.4	7.4	6	2	4	1.2	4.5	155	Z5

***Zener voltage is measured a pulse test current I_Z at an ambient temperature of 25°C

BZX84C3V3_75V (SSV)Rev240405E



Pin Configuration
 1 = ANODE
 2 = NC
 3 = CATHODE

SOT-23
 Formed SMD Package

Forward Voltage at $I_F=10\text{mA}$ <0.9V

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

Device	***V _{Z1} (V) @ I _{ZT1} =5mA		Z _{ZT1} (W) @ I _{ZT1} = 5mA max	***V _{Z2} (V) @ I _{ZT2} =1mA		Z _{ZT2} (W) @ I _{ZT2} = 1mA max	***V _{Z3} (V) @ I _{ZT3} =20mA		Z _{ZT3} (W) @ I _{ZT3} = 20mA Max	Max Reverse Leakage Current I _R @ V _R mA (V)		QVz (mv/k) @ I _{ZT1} =5mA		C (pF) @ V _R =0 f=1MHz	Marking
	min	max		min	max		Min	Max		Max	Max	Min	Max		
	BZX84C7V5	7.0	7.9	15	6.9	7.9	80	7.0	8.0	6	1.0	5	2.5	5.3	140
BZX84C8V2	7.7	8.7	15	7.6	8.7	80	7.7	8.8	6	0.7	5	3.2	6.2	135	Z7
BZX84C9V1	8.5	9.6	15	8.4	9.6	100	8.5	9.7	8	0.5	6	3.8	7.0	130	Z8
BZX84C10	9.4	10.6	20	9.3	10.6	150	9.4	10.7	10	0.2	7	4.5	8.0	130	Z9
BZX84C11	10.4	11.6	20	10.2	11.6	150	10.4	11.8	10	0.1	8	5.4	9.0	130	Y1
BZX84C12	11.4	12.7	25	11.2	12.7	150	11.4	12.9	10	0.1	8	6.0	10	130	Y2
BZX84C13	12.4	14.1	30	12.3	14.0	170	12.5	14.2	15	0.1	8	7.0	11	120	Y3
BZX84C15	14.3	15.8	30	13.7	15.5	200	13.9	15.7	20	0.05	10.5	9.2	13	110	Y4
BZX84C16	15.3	17.1	40	15.2	17.0	200	15.4	17.2	20	0.05	11.2	10.4	14	105	Y5
BZX84C18	16.8	19.1	45	16.7	19.0	225	16.9	19.2	20	0.05	12.6	12.4	16	100	Y6
BZX84C20	18.8	21.2	55	18.7	21.1	225	18.9	21.4	20	0.05	14	14.4	18	85	Y7
BZX84C22	20.8	23.2	55	20.7	23.2	250	20.9	23.4	25	0.05	15.4	16.4	20	85	Y8
BZX84C24	22.8	25.6	70	22.7	25.5	250	22.9	25.7	25	0.05	16.8	18.4	22	80	Y9

Device	***V _{Z1} (V) @ I _{ZT1} =2mA		Z _{ZT1} (W) @ I _{ZT1} = 2mA max	***V _{Z2} (V) @ I _{ZT2} =0.1mA		Z _{ZT2} (W) @ I _{ZT2} = 0.5mA max	***V _{Z3} (V) @ I _{ZT3} =10mA		Z _{ZT3} (W) @ I _{ZT3} = 10mA Max	Max Reverse Leakage Current I _R @ V _R mA (V)		QVz (mv/k) @ I _{ZT1} =2mA		C (pF) @ V _R =0 f=1MHz	Marking
	min	max		min	max		Min	Max		Max	Max	Min	Max		
	BZX84C27	25.1	28.9	80	25	28.9	300	25.2	29.3	45	0.05	18.9	21.4	25.3	70
BZX84C30	28	32	80	27.8	32	300	28.1	32.4	50	0.05	21.0	24.4	29.4	70	Y11
BZX84C33	31	35	80	30.8	35	325	31.1	35.4	55	0.05	23.1	27.4	33.4	70	Y12
BZX84C36	34	38	90	33.8	38	350	34.1	38.4	60	0.05	25.2	30.4	37.4	70	Y13
BZX84C39	37	41	130	36.7	41	350	37.1	41.5	70	0.05	27.3	33.4	41.2	45	Y14
BZX84C43	40	46	150	39.7	46	375	40.1	46.5	80	0.05	30.1	37.6	46.6	40	Y15
BZX84C47	44	50	170	43.7	50	375	44.1	50.5	90	0.05	32.9	42.0	51.8	40	Y16
BZX84C51	48	54	180	47.6	54	400	48.1	54.6	100	0.05	35.7	46.6	57.2	40	Y17
BZX84C56	52	60	200	51.5	60	425	52.1	60.8	110	0.05	39.2	52.2	63.8	40	Y18
BZX84C62	58	66	215	57.4	66	450	58.2	67.0	120	0.05	43.4	58.8	71.6	35	Y19
BZX84C68	64	72	240	63.4	72	475	64.2	73.2	130	0.05	47.6	65.6	79.8	35	Y20
BZX84C75	70	79	255	69.4	79	500	70.3	80.2	140	0.05	52.5	73.4	88.6	35	Y21

***Zener voltage is measured a pulse test current I_Z at an ambient temperature of 25°C

BZX84C3V3_75V (SSV)Rev240405E

Disclaimer

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