

Zener Diodes

350mW SOT-23

BZX84Cxx series

MERITEK

FEATURE

- Zener Breakdown Voltage Range: 2.0V to 75V
- Compac Constrution Dessign
- Package Designed for Optimal Automated Assembly



ELECTRICAL CHARACTERISTICS

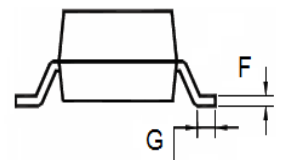
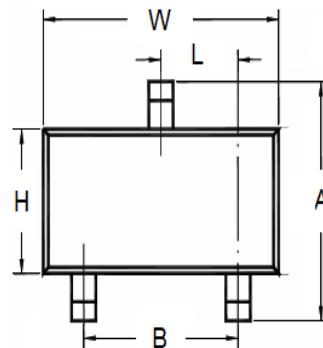
Parameter	Symbols	Value	Unit
Power Dissipation	P_{TOT}	350	mW
Maximum Forward Voltage at $I_F=10mA$	V_F	0.9	V
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	417	$^{\circ}C/W$
Storage Temperature Range	T_{STG}	-65 to +150	$^{\circ}C$

Note:

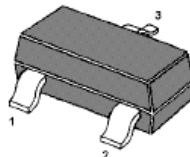
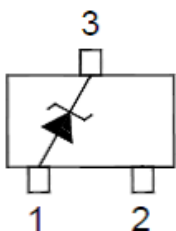
1. $T_A = 25^{\circ}C$ unless otherwise specified
2. Alumina=0.4×0.3×0.024in, 99.5% alumina

DIMENSIONS

Item	Min. (inches)	Max. (inches)
W	2.70	3.10
H	1.20	1.66
L	0.89	1.02
A	2.20	3.00
B	1.78	2.04
C	0.35	0.50
D	0.95	1.40
E	0.013	0.100
F	0.08	0.190
G	0.2	-



PIN CONFIGURATION



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ELECTRICAL CHARACTERISTICS TABLE

Part Number	Zener Voltage Range				Dynamic Impedance		Reverse Leakage Current	
	V _{ZT}			I _{ZT}	Z _{ZT}	I _{ZT}	I _R	V _R
	Min. (V)	Nom. (V)	Max. (V)	mA	Max. (Ω)	mA	Max. (μA)	V
BZX84C2V0	1.80	2.0	2.15	5	100	5	120	0.5
BZX84C2V2	2.08	2.2	2.33	5	100	5	120	0.7
BZX84C2V4	2.20	2.4	2.60	5	100	5	50.0	1.0
BZX84C2V7	2.50	2.7	2.90	5	100	5	20.0	1.0
BZX84C3V0	2.80	3.0	3.20	5	95	5	10.0	1.0
BZX84C3V3	3.10	3.3	3.50	5	95	5	5.0	1.0
BZX84C3V6	3.40	3.6	3.80	5	90	5	5.0	1.0
BZX84C3V9	3.70	3.9	4.10	5	90	5	3.0	1.0
BZX84C4V3	4.00	4.3	4.60	5	90	5	3.0	1.0
BZX84C4V7	4.40	4.7	5.00	5	80	5	3.0	2.0
BZX84C5V1	4.80	5.1	5.40	5	60	5	2.0	2.0
BZX84C5V6	5.20	5.6	6.00	5	40	5	1.0	2.0
BZX84C6V2	5.80	6.2	6.60	5	10	5	3.0	4.0
BZX84C6V8	6.40	6.8	7.20	5	15	5	2.0	4.0
BZX84C7V5	7.00	7.5	7.90	5	15	5	1.0	5.0
BZX84C8V2	7.70	8.2	8.70	5	15	5	0.7	5.0
BZX84C9V1	8.50	9.1	9.60	5	15	5	0.5	6.0
BZX84C10	9.40	10.0	10.60	5	20	5	0.2	7.0
BZX84C11	10.40	11.0	11.60	5	20	5	0.1	8.0
BZX84C12	11.40	12.0	12.70	5	25	5	0.1	8.0
BZX84C13	12.40	13.0	14.10	5	30	5	0.1	8.0
BZX84C15	13.80	15.0	15.60	5	30	5	0.05	10.5
BZX84C16	15.30	16.0	17.10	5	40	5	0.05	11.2
BZX84C18	16.80	18.0	19.10	5	45	5	0.05	12.6
BZX84C20	18.80	20.0	21.20	5	55	5	0.05	14.0
BZX84C22	20.80	22.0	23.30	5	55	5	0.05	15.4
BZX84C24	22.80	24.0	25.60	5	70	5	0.05	16.8
BZX84C27	25.10	27.0	28.90	2	80	2	0.05	18.9
BZX84C30	28.00	30.0	32.00	2	80	2	0.05	21.0
BZX84C33	31.00	33.0	35.00	2	80	2	0.05	23.1
BZX84C36	34.00	36.0	38.00	2	90	2	0.05	25.2
BZX84C39	37.00	39.0	41.00	2	130	2	0.05	27.3
BZX84C43	40.00	43.0	46.00	2	150	2	0.05	30.1
BZX84C47	44.00	47.0	50.00	2	170	2	0.05	32.9
BZX84C51	48.00	51.0	54.00	2	180	2	0.05	35.7
BZX84C56	52.00	56.0	60.00	2	200	2	0.05	39.2
BZX84C62	58.00	62.0	66.00	2	215	2	0.05	43.4
BZX84C68	64.00	68.0	72.00	2	240	2	0.05	47.6
BZX84C75	70.00	75.0	79.00	2	255	2	0.05	52.5

Note: Tested with pulses tp=20ms

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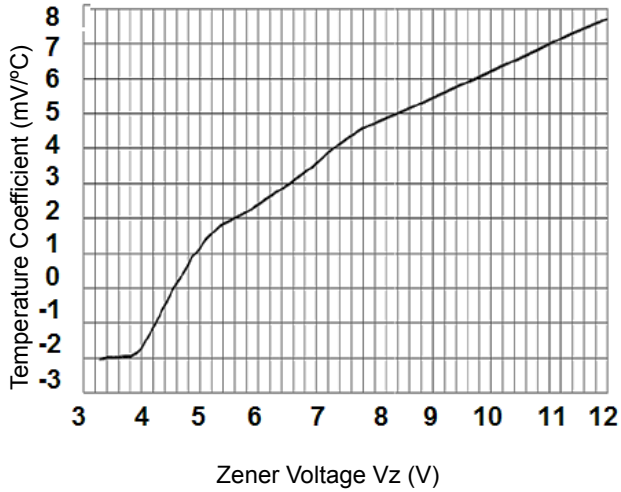
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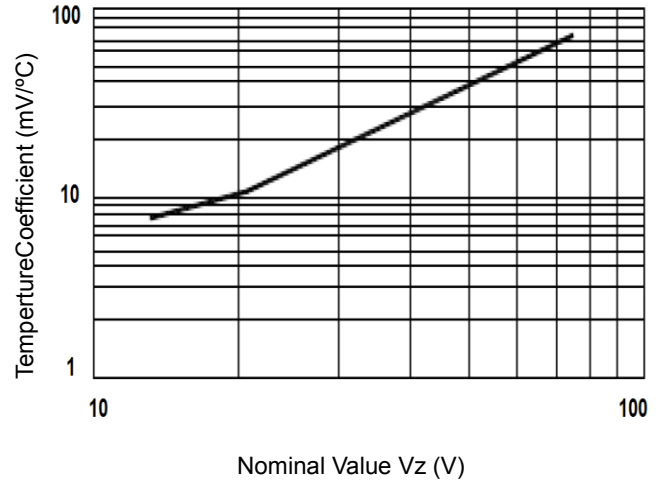
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CHARACTERISTICS CURVES

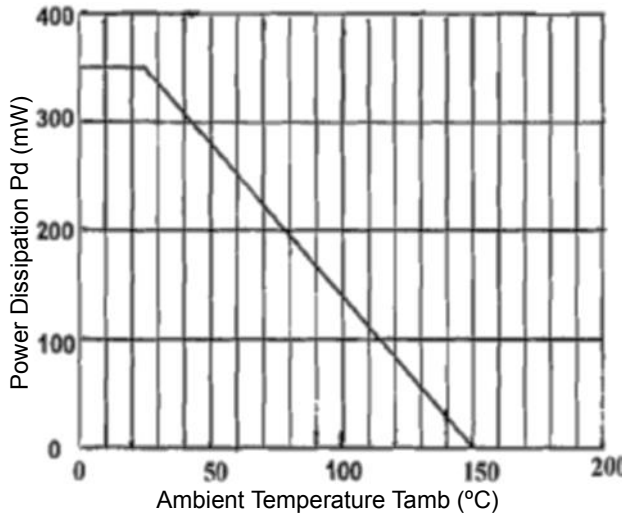
Temperature Coefficient



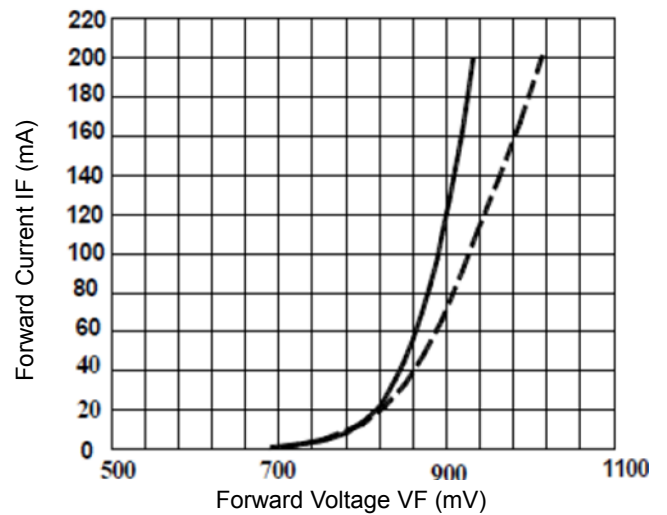
Temperature Coefficient



Power Derating Curve



Typical Forward Voltage



Zener Voltage Regulator

