Elektronische Bauelemente

BZX84CxxxW Series

200 mW SOT-323 Series

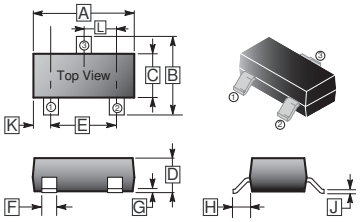
Surface Mount Zener Voltage Regulator Diodes

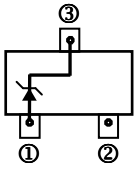
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Planar die construction
- 200mW power dissipation
- Zener voltages from 2.4V - 39V
- Ultra-small surface mount package power dissipation

SOT-323





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	F	0.20	0.40
B	2.15	2.45	G	-	-
C	1.15	1.35	H	0.525 REF.	
D	0.90	1.10	J	0.08	0.15
E	1.20	1.40			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNITS
Forward Voltage (Note 2) @ I_F = 10mA	V_F	0.9	V
Power Dissipation (Note 1)	P_D	200	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	°C / W
Junction and Storage Temperature Range	T_J, T_{STG}	-65 ~ 150	°C

ELECTRICAL RATINGS (Rating 25℃ ambient temperature unless otherwise s pecified)

Type Number	Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current		Temperature Coefficient Zener Voltage @ I_{ZT} = 5mA (mV/°C)	
		V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	@V_R		
		Nom (V)	Min (V)	Max (V)	mA	Ω		mA	uA	V	Min	Max
BZX84C2V4W	KRB	2.4	2.2	2.6	5	100	600	1	50	1	-3.5	0
BZX84C2V7W	KRC	2.7	2.5	2.9	5	100	600	1	20	1	-3.5	0
BZX84C3V0W	KRD	3	2.8	3.2	5	95	600	1	20	1	-3.5	0
BZX84C3V3W	KRE	3.3	3.1	3.5	5	95	600	1	5	1	-3.5	0
BZX84C3V6W	KRF	3.6	3.4	3.8	5	90	600	1	5	1	-3.5	0
BZX84C3V9W	KRG	3.9	3.7	4.1	5	90	600	1	3	1	-3.5	0
BZX84C4V3W	KRH	4.3	4	4.6	5	90	600	1	3	1	-3.5	0
BZX84C4V7W	KR1	4.7	4.4	5	5	80	600	1	3	2	-3.5	0.2
BZX84C5V1W	KR2	5.1	4.8	5.4	5	60	500	1	2	2	-2.7	1.2
BZX84C5V6W	KR3	5.6	5.2	6	5	40	480	1	1	2	-2	2.5
BZX84C6V2W	KR4	6.2	5.8	6.6	5	10	400	1	3	4	0.4	3.7
BZX84C6V8W	KR5	6.8	6.4	7.2	5	15	150	1	2	4	1.2	4.5
BZX84C7V5W	KR6	7.5	7	7.9	5	15	80	1	1	5	2.5	5.3
BZX84C8V2W	KR7	8.2	7.7	8.7	5	15	80	1	0.7	5	3.2	6.2
BZX84C9V1W	KR8	9.1	8.5	9.6	5	15	80	1	0.5	6	3.8	7
BZX84C10W	KR9	10	9.4	10.6	5	20	100	1	0.2	7	4.5	8
BZX84C11W	KP1	11	10.4	11.6	5	20	150	1	0.1	8	5.4	9
BZX84C12W	KP2	12	11.4	12.7	5	25	150	1	0.1	8	6	10
BZX84C13W	KP3	13	12.4	14.1	5	30	150	1	0.1	8	7	11
BZX84C15W	KP4	15	13.8	15.6	5	30	170	1	0.1	10.5	9.2	13
BZX84C16W	KP5	16	15.3	17.1	5	40	200	1	0.1	11.2	10.4	14
BZX84C18W	KP6	18	16.8	19.1	5	45	200	1	0.1	12.6	12.4	16
BZX84C20W	KP7	20	18.8	21.2	5	55	225	1	0.1	14	14.4	18
BZX84C22W	KP8	22	20.8	23.3	5	55	225	1	0.1	15.4	16.4	20
BZX84C24W	KP9	24	22.8	25.6	5	70	250	1	0.1	16.8	18.4	22
BZX84C27W	KPA	27	25.1	28.9	2	80	250	0.5	0.1	18.9	21.4	25.3
BZX84C30W	KPB	30	28	32	2	80	300	0.5	0.1	21	24.4	29.4
BZX84C33W	KPC	33	31	35	2	80	300	0.5	0.1	23.1	27.4	33.4
BZX84C36W	KPD	36	34	38	2	90	325	0.5	0.1	25.2	30.4	37.4
BZX84C39W	KPE	39	37	41	2	130	350	0.5	0.1	27.3	33.4	41.2

Notes: 1. Valid provided that device terminals are kept at ambient temperature.
2. Tested with pulses, 300μs pulse width, 2% duty cycle.
3. f = 1KHz.

CHARACTERISTIC CURVES

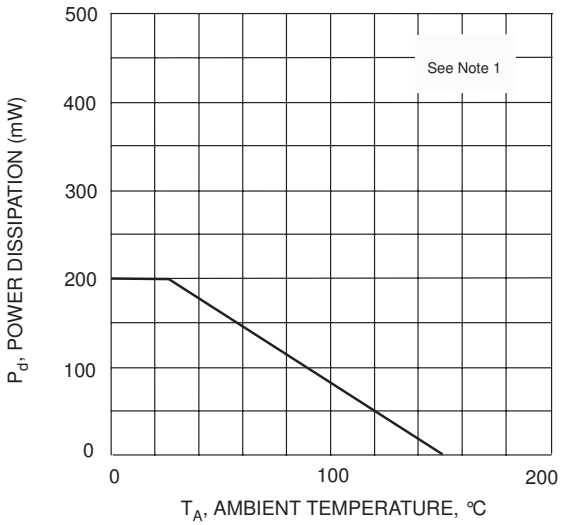


Fig. 1. Power Derating Curve

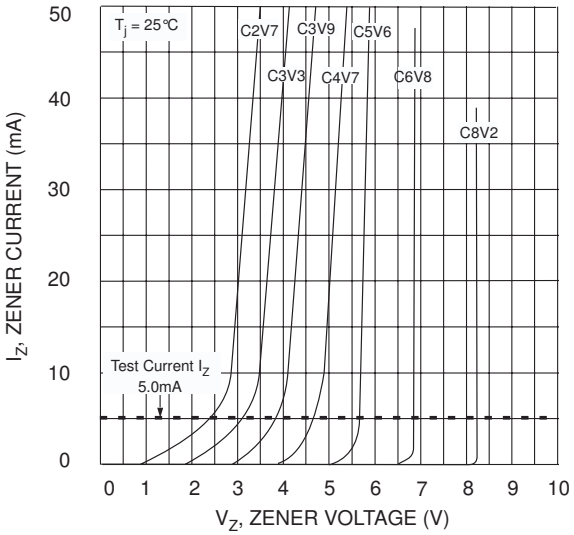


Fig. 2 Zener Breakdown Characteristics

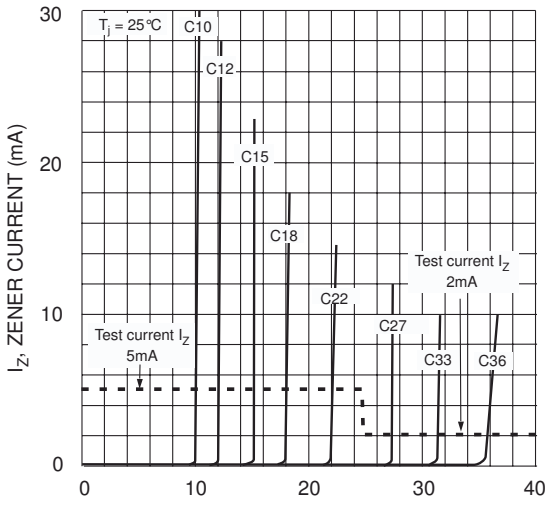


Fig. 3, Zener Breakdown Characteristics