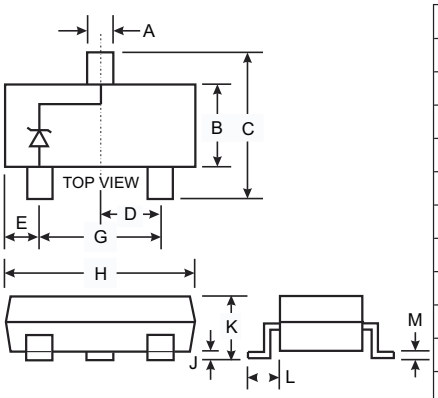
RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

BZX84C2V4V THRU BZX84C75V

Features

- Planar Die Construction
- 500mW Power Dissipation
- Zener Voltages from 2.4V - 75V
- Ideally Suited for Automated Assembly Processes
- P/N suffix V means AEC-Q 101qualified, e.g:BZX84C2V4V
- P/N suffix V means Halogen-free
- ESD:HBM ----3B,MSL:Level 1



SOT-23		
Dim	**Min**	**Max**
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

Maximum Ratings @TA =25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I_F = 10mA	V_F	0.9	V
Power Dissipation (Note 1)	P_d	350	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	357	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	°C

Notes: 1. Valid provided that device terminals are kept at ambient temperature.

2. Tested with pulses, 300μs pulse width, period = 5ms.

3. f = 1KHz.

2024-06/03
REV:A

Part Number	Marking	Nominal Zener Voltage			Max. Zener Impedance				Max.Reverse Leakage Current	
		Vz(V) @ I_{ZT} *1			Z_{ZT} @ I_{ZT}		Z_{ZK} @ I_{ZK}		IR @ VR	
		Nom.	Min.	Max.	Ohm	mA	Ohm	mA	μA	V
BZX84C2V4	Z11	2.4	2.28	2.52	100	5	600	1	50	1.0
BZX84C2V7	Z12	2.7	2.5	2.9	100	5	600	1	20	1.0
BZX84C3V0	Z13	3	2.8	3.2	95	5	600	1	10	1.0
BZX84C3V3	Z14	3.3	3.1	3.5	95	5	600	1	5	1.0
BZX84C3V6	Z15	3.6	3.4	3.8	90	5	600	1	5	1.0
BZX84C3V9	Z16	3.9	3.7	4.1	90	5	600	1	3	1.0
BZX84C4V3	Z17	4.3	4	4.6	90	5	600	1	3	1.0
BZX84C4V7	Z1	4.7	4.4	5	80	5	500	1	3	2.0
BZX84C5V1	Z2	5.1	4.8	5.4	60	5	480	1	2	2.0
BZX84C5V6	Z3	5.6	5.2	6	40	5	400	1	1	2.0
BZX84C6V2	Z4	6.2	5.8	6.6	10	5	150	1	3	4.0
BZX84C6V8	Z5	6.8	6.4	7.2	15	5	80	1	2	4.0
BZX84C7V5	Z6	7.5	7	7.9	15	5	80	1	1	5.0
BZX84C8V2	Z7	8.2	7.7	8.7	15	5	80	1	0.7	5.0
BZX84C9V1	Z8	9.1	8.5	9.6	15	5	100	1	0.5	6.0
BZX84C10	Z9	10	9.4	10.6	20	5	150	1	0.2	7.0
BZX84C11	Y1	11	10.4	11.6	20	5	150	1	0.1	8.0
BZX84C12	Y2	12	11.4	12.7	25	5	150	1	0.1	8.0
BZX84C13	Y3	13	12.4	14.1	30	5	170	1	0.1	8.0
BZX84C15	Y4	15	13.8	15.6	30	5	200	1	0.1	10.5
BZX84C16	Y5	16	15.3	17.1	40	5	200	1	0.1	11.2
BZX84C18	Y6	18	16.8	19.1	45	5	225	1	0.1	12.6
BZX84C20	Y7	20	18.8	21.2	55	5	225	1	0.1	14.0
BZX84C22	Y8	22	20.8	23.3	55	5	250	1	0.1	15.4
BZX84C24	Y9	24	22.8	25.6	70	5	250	1	0.1	16.8
BZX84C27	Y10	27	25.1	28.9	80	2	300	1	0.1	18.9
BZX84C30	Y11	30	28	32	80	2	300	1	0.1	21.0
BZX84C33	Y12	33	31	35	80	2	325	1	0.1	23.1
BZX84C36	Y13	36	34	38	90	2	350	1	0.1	25.2
BZX84C39	Y14	39	37	41	130	2	350	1	0.1	27.3
BZX84C43	Y15	43	40.85	45.15	150	5	375	1	0.1	30.1
BZX84C47	Y16	47	44.65	49.35	170	5	375	1	0.1	32.9
BZX84C51	Y17	51	48.45	53.55	100	5	400	1	0.1	35.7
BZX84C62	Y19	62	58.0	66.0	215	2	450	0.5	0.05	43.4
BZX84C68	Y20	68	64.60	71.40	240	2	1600	0.25	0.1	52
BZX84C75	Y21	75	71.25	78.75	265	2	1700	0.25	0.1	56

Notes: 1. Valid provided that device terminals are kept at ambient temperature.
2. Tested with pulses, 300μs pulse width, period = 5ms.
3. f = 1KHz.

RATING AND CHARACTERISTICS CURVES (BZX84C2V4V THRU BZX84C75V)

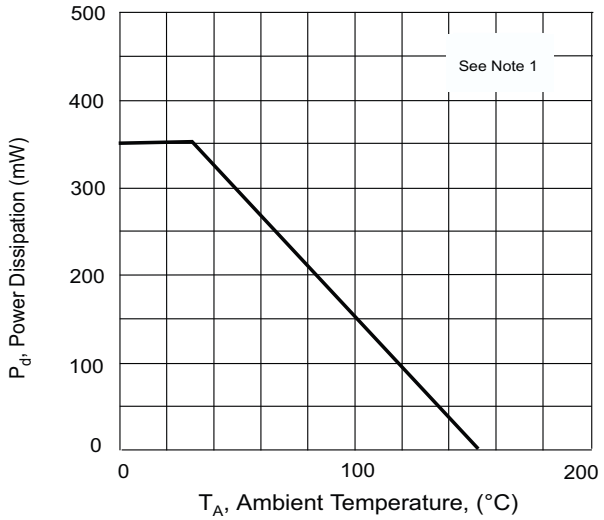


Fig. 1 Power Derating Curve

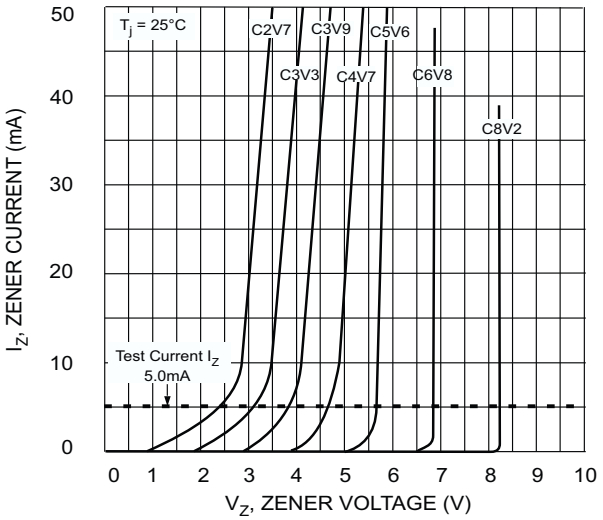


Fig. 2 Zener Breakdown Characteristics

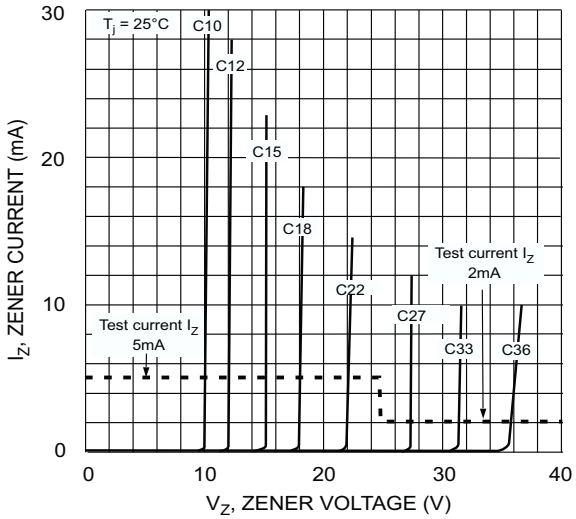


Fig. 3 Zener Breakdown Characteristics

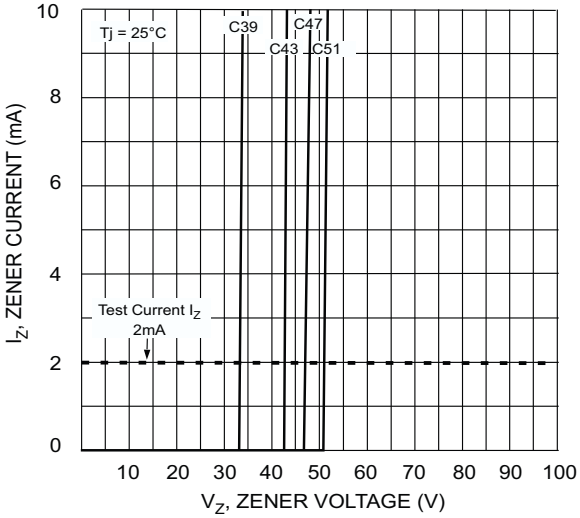


Fig. 4 Zener Breakdown Characteristics

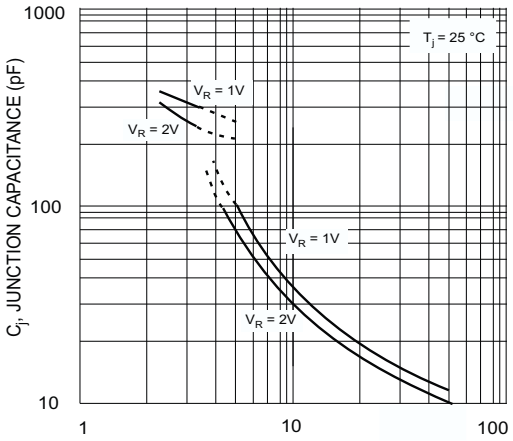


Fig. 5 Junction Capacitance vs Nominal Zener Voltage

PACKAGING OF DIODE

REEL PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOT-23/-3L	-T	3,000	---	---	178	438*438*220	180,000	---

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