POWER SEMICONDUCTOR

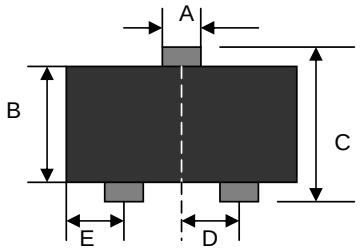
BZX84C2V4 ~ BZX84C51

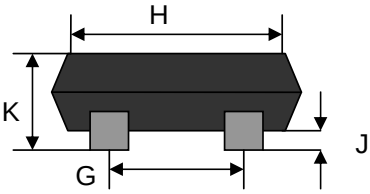
350mW Surface Mount Zener Diode

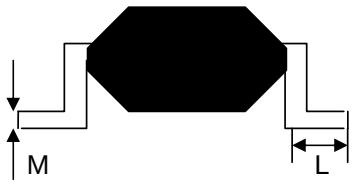
FEATURE

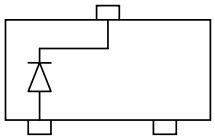
- Planar Die Construction
- 350mW Power Dissipation
- 2.4V~51V Nominal Zener Voltage
- ±5% Standard Vz Tolerance
- Desingned for Surface Mount Application
- Plastic Meterial - UL Recogntion Flammability Classification 94V-O

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	0.078	0.18
All Dimension in mm		









Top View

MECHANICAL DATA

- Case: SOT-23, Molded Plastic.
- Terminals: Solder Plated, Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weught: 0.(BAT42W = L2
- Mounting: F BAT43W = L3
- Marking: Device code, See in page.
- Lead Free: For RoHS / Lead free Version, Add "LF" suffix to part Number, See in page.

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS @TA = 25℃ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at TA=25℃ (Note 1)	Pd	350	m/W
Forward Voltage @ IF = 10mA	VF	0.9	V
Thermal Resistance Jinction to Ambient (Note 1)	RθJA	357	℃/W
Operating and storge temperation range	TJ1, TSTG	-65 to +150	℃

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

品質承諾標誌
Quality Commitment

BZX84C2V4 - BZX84C51

350mW Surface Mount Zener Diode

Electrical Characteristics @Ta = 25℃ unless otherwise specified

Type Number (Note 1) ±5%	Device Marking Code	Zener Voltage Range (Note 2) Vz @ IZT Nom (V)	Min (V)	Max (V)	Maximum Zener Impedance (Note 3) ZZT @ IZT Ω	(mA)	ZZK @ IZK Ω	(mA)	Max Reverse Leakage IR (uA)	@ VR (V)	Temp. Coefficient of zener voltage @IZT mV/℃	
BZX52C2V4	W1	2.40	2.28	2.52	100.0	5.0	600	1.0	50.0	1.0	-3.5	0
BZX52C2V7	W2	2.70	2.57	2.84	100.0	5.0	600	1.0	20.0	1.0	-3.5	0
BZX52C3V0	W3	3.00	2.85	3.15	95.0	5.0	600	1.0	10.0	1.0	-3.5	0
BZX52C3V3	W4	3.30	3.14	3.47	95.0	5.0	600	1.0	5.0	1.0	-3.5	0
BZX52C3V6	W5	3.60	3.42	3.78	90.0	5.0	600	1.0	5.0	1.0	-3.5	0
BZX52C3V9	W6	3.90	3.71	4.10	90.0	5.0	600	1.0	3.0	1.0	-3.5	0
BZX52C4V3	W7	4.30	4.09	4.52	90.0	5.0	600	1.0	3.0	1.0	-3.5	0
BZX52C4V7	W8	4.70	4.47	4.94	80.0	5.0	500	1.0	3.0	2.0	-3.5	0.2
BZX52C5V1	W9	5.10	4.85	5.36	60.0	5.0	480	1.0	2.0	2.0	-2.7	1.2
BZX52C5V6	WA	5.60	5.32	5.88	40.0	5.0	400	1.0	1.0	2.0	-2.0	2.5
BZX52C6V2	WB	6.20	5.89	6.51	10.0	5.0	150	1.0	3.0	4.0	0.4	3.7
BZX52C6V8	WC	6.80	6.46	7.14	15.0	5.0	80	1.0	2.0	4.0	1.2	4.5
BZX52C7V5	WD	7.50	7.13	7.88	15.0	5.0	80	1.0	1.0	5.0	2.5	5.3
BZX52C8V2	WE	8.20	7.79	8.61	15.0	5.0	80	1.0	0.7	5.0	3.2	6.2
BZX52C9V1	WF	9.10	8.65	9.56	15.0	5.0	100	1.0	0.5	6.0	3.8	7
BZX52C10V	WG	10.00	9.50	10.50	20.0	5.0	150	1.0	0.2	7.0	4.5	8
BZX52C11V	WH	11.00	10.45	11.55	20.0	5.0	150	1.0	0.1	8.0	5.4	9
BZX52C12V	WI	12.00	11.40	12.60	25.0	5.0	150	1.0	0.1	8.0	6.0	10
BZX52C13V	WK	13.00	12.35	13.65	30.0	5.0	170	1.0	0.1	8.0	7.0	11
BZX52C15V	WL	15.00	14.25	15.75	30.0	5.0	200	1.0	0.1	10.5	9.2	13
BZX52C16V	WM	16.00	15.20	16.80	40.0	5.0	200	1.0	0.1	11.2	10.4	14
BZX52C18V	WN	18.00	17.10	18.90	45.0	5.0	225	1.0	0.1	12.6	12.4	16
BZX52C20V	WO	20.00	19.00	21.00	55.0	5.0	225	1.0	0.1	14.0	14.4	18
BZX52C22V	WP	22.00	20.90	23.10	55.0	5.0	250	1.0	0.1	15.4	16.4	20
BZT52C24V	WR	24.00	22.80	25.20	70.0	5.0	250	1.0	0.1	16.8	18.4	22
BZX52C27V	WS	27.00	25.65	28.35	80.0	5.0	300	1.0	0.1	18.9	21.4	25.3
BZX52C30V	WT	30.00	28.50	31.50	80.0	5.0	300	1.0	0.1	21.0	24.4	29.4
BZX52C33V	WU	33.00	31.35	34.65	80.0	5.0	325	1.0	0.1	23.1	27.4	33.4
BZX52C36V	WW	36.00	34.20	37.80	90.0	5.0	350	1.0	0.1	25.2	30.4	37.4
BZX52C39V	WX	39.00	37.05	40.95	130.0	5.0	350	1.0	0.1	27.3	33.4	41.2
BZX52C43V	WY	43.00	40.85	45.15	150	5.0	375	1.0	0.1	30.1	10.0	12
BZX52C47V	WZ	47.00	44.65	49.35	170	5.0	375	1.0	0.1	32.9	10.0	12
BZX52C51V	XA	51.00	48.45	53.55	100	5.0	400	1.0	0.1	38.0	10.0	12

Note: (1) Type numbers listed have standard tplerance on the nominal zener voltage of ±5%.
(2) Measured with pulses tp = 5ms.
(3) f = 1KHz

品質承諾標誌
Quality Commitment

Typical Characterstics.

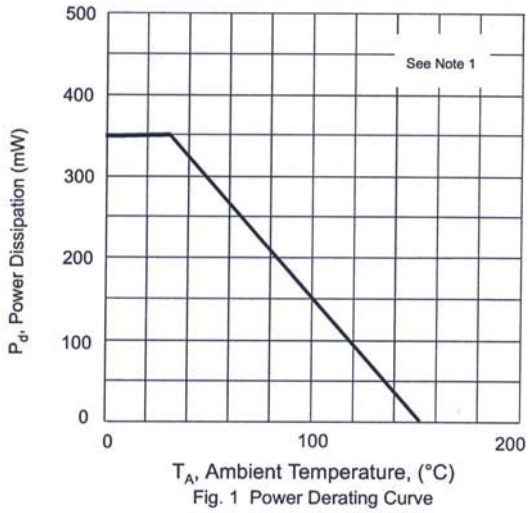


Fig. 1 Power Derating Curve

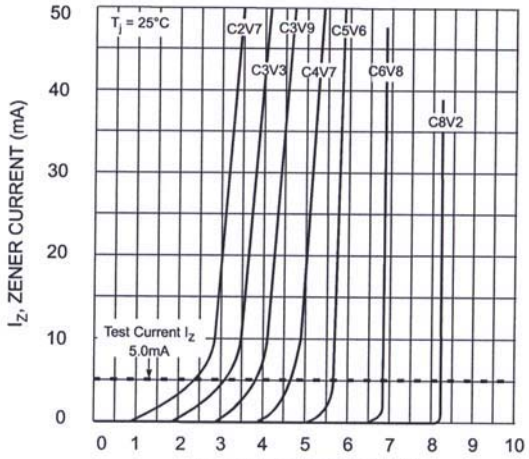


Fig. 2 Zener Breakdown Characteristics

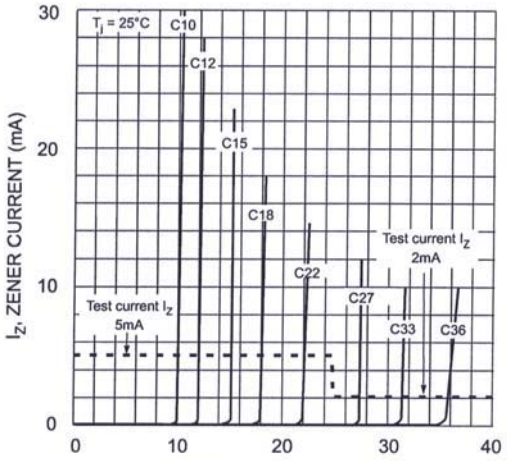


Fig. 3 Zener Breakdown Characteristics

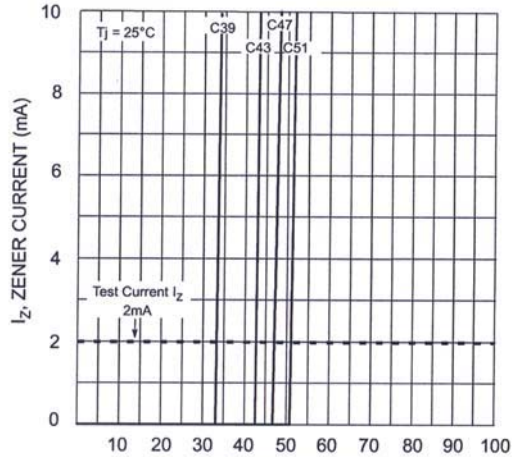


Fig. 4 Zener Breakdown Characteristics

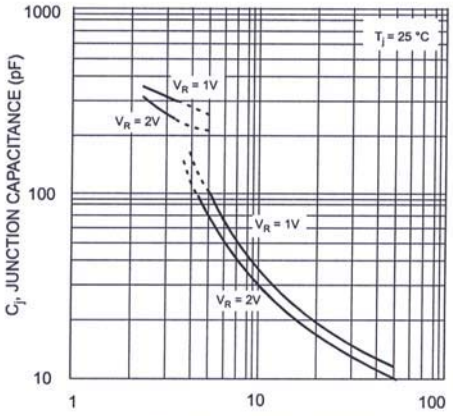


Fig. 5 Junction Capacitance vs Nominal Zener Voltage

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Quality Commitment

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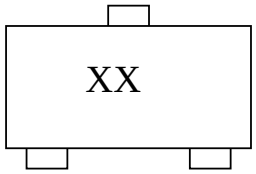
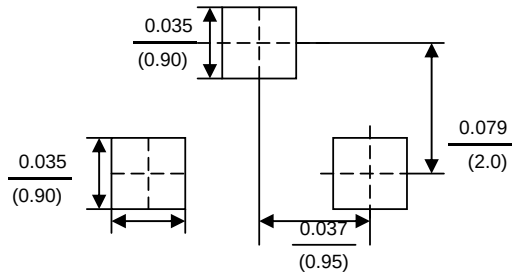
MARKING INFORMATION

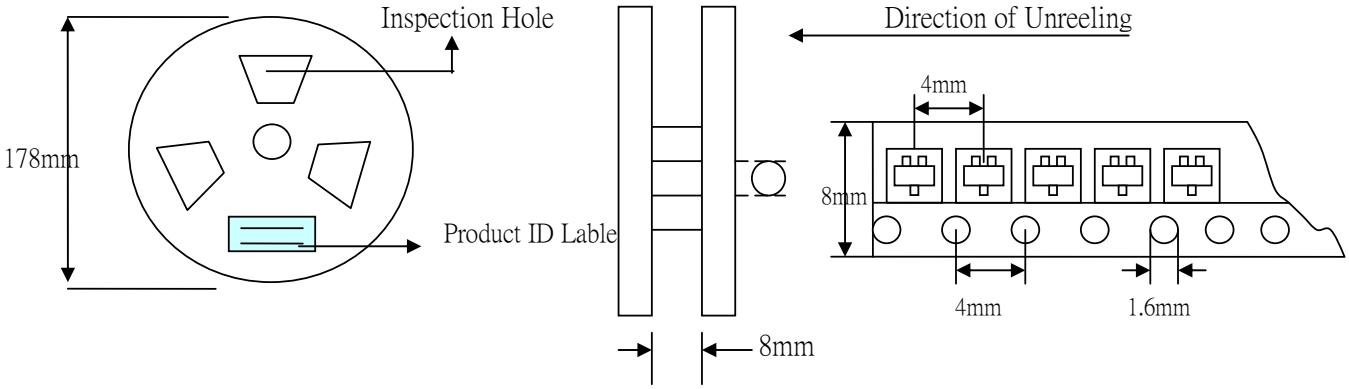


xx = Device code.

RECPMMENDED FOOTPRINT



MARKING INFORMATION



Reel Diameter (mm)	Quantity (PCS)	Inner bax Size LxWxH (mm)	Quantity (PCS)	Carton Size LxWxH (mm)	Quantity (PCS)	Approx Gross Weight (KG)
178	3000	187x187x65	15000	390x240x420	150000	10.0

Note: 1). Anti-static plastic reel, white, water clear or blue color, inspection hole might be varied in different alinment.
2). Components are packed in accprdance with EIA standerd 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping quantity
BZX84Cxx-T1	SOT-23	3000/Tape & Reel

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