

# **BZX884B2V4 thru BZX884B75**

Surface Mount Zener Diodes

V<sub>z</sub> Range: 2.4 to 75V Power Dissipation: 250mW

## Features

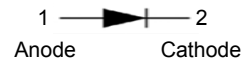
- Planar Die Construction
- 250mW Power Dissipation
- Zener Voltages from 2.4V-75V



DFN1006



**RoHS**  
COMPLIANT



Schematic Diagram

## Mechanical Data

- Case: DFN1006

## Maximum Ratings and Thermal Characteristics

(T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Forward Voltage @ I <sub>F</sub> =10mA	V <sub>F</sub>	0.9	V
Power Dissipation	P <sub>(AV)</sub>	250	mW
Peak Forward Surge Current	I <sub>FSM</sub>	2	A
Thermal Resistance, Junction to Ambient	R <sub>J</sub>	417	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 To +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 To +150	°C

## Electrical Characteristics

(T<sub>A</sub>=25°C, unless otherwise specified)

Part Number	V <sub>z</sub> (V) <sup>1</sup>			I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	Z <sub>ZK@I<sub>ZK</sub></sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (uA)	V <sub>R</sub> (V)
	Nom (V)	Min (V)	Max (V)						
BZX884B2V4	2.4	2.35	2.45	5	100	400	1	50	1
BZX884B2V7	2.7	2.65	2.75	5	100	450	1	20	1
BZX884B3V0	3	2.94	3.06	5	95	500	1	10	1
BZX884B3V3	3.3	3.23	3.37	5	95	500	1	5	1
BZX884B3V6	3.6	3.53	3.67	5	90	500	1	5	1
BZX884B3V9	3.9	3.82	3.98	5	90	500	1	3	1
BZX884B4V3	4.3	4.21	4.39	5	90	600	1	3	1
BZX884B4V7	4.7	4.61	4.79	5	80	500	1	3	2
BZX884B5V1	5.1	5	5.2	5	60	480	1	2	2
BZX884B5V6	5.6	5.49	5.71	5	40	400	1	1	2

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## **Electrical Characteristics**

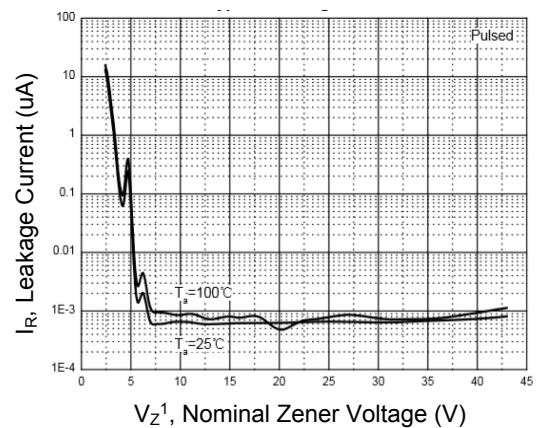
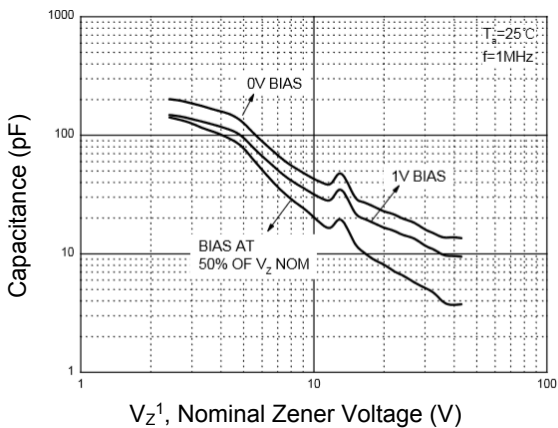
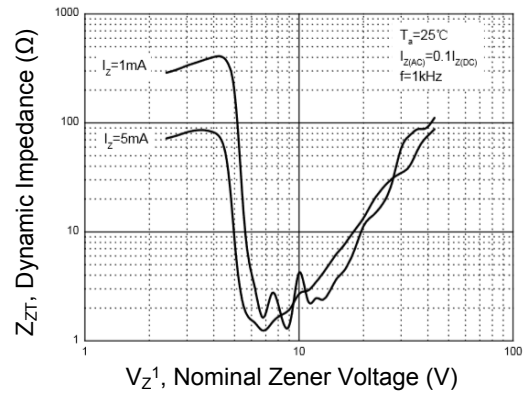
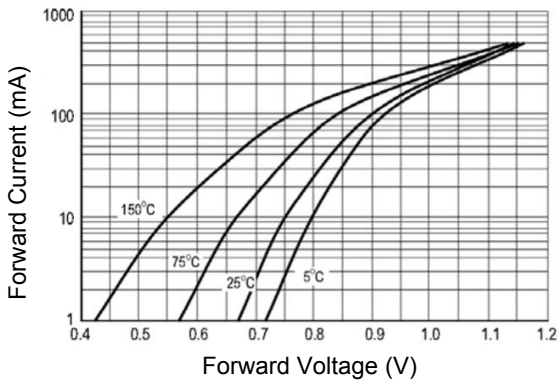
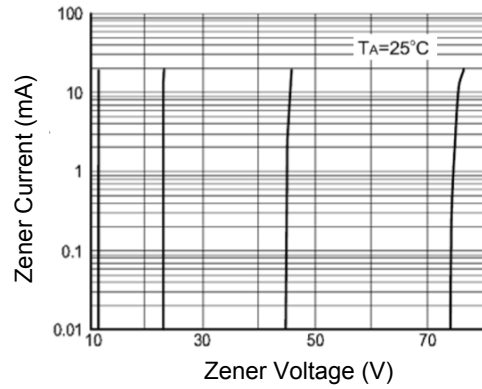
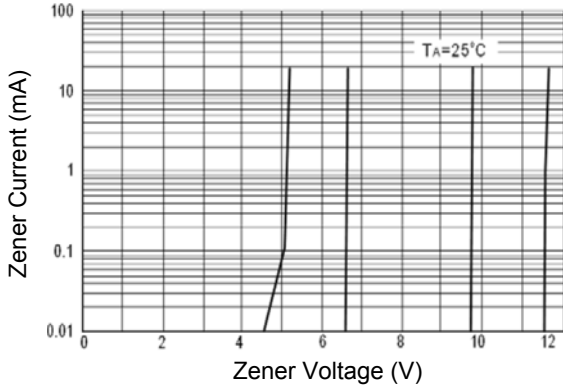
(T<sub>A</sub>=25°C, unless otherwise specified)

Part Number	V <sub>Z</sub> (V) <sup>1</sup>			I <sub>ZT</sub> (mA)	Z <sub>ZT@I<sub>ZT</sub></sub> (Ω)	Z <sub>ZK@I<sub>ZK</sub></sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	V <sub>R</sub> (V)
	Nom (V)	Min (V)	Max (V)						
BZX884B6V2	6.2	6.08	6.32	5	10	150	1	3	4
BZX884B6V8	6.8	6.66	6.94	5	15	80	1	2	4
BZX884B7V5	7.5	7.35	7.65	5	15	80	1	1	5
BZX884B8V2	8.2	8.04	8.36	5	15	80	1	0.7	5
BZX884B9V1	9.1	8.92	9.28	5	15	100	1	0.5	6
BZX884B10	10	9.8	10.2	5	20	150	1	0.2	7
BZX884B11	11	10.78	11.22	5	20	150	1	0.1	8
BZX884B12	12	11.76	12.24	5	25	150	1	0.1	8
BZX884B13	13	12.74	13.26	5	30	170	1	0.1	8
BZX884B15	15	14.7	15.3	5	30	200	1	0.05	10.5
BZX884B16	16	15.68	16.32	5	40	200	1	0.05	11.2
BZX884B18	18	17.64	18.36	5	45	225	1	0.05	12.6
BZX884B20	20	19.6	20.4	5	55	225	1	0.05	14
BZX884B22	22	21.56	22.44	5	55	250	1	0.05	15.4
BZX884B24	24	23.52	24.48	5	70	250	1	0.05	16.8
BZX884B27	27	26.46	27.54	2	80	300	0.5	0.05	18.9
BZX884B30	30	29.4	30.6	2	80	300	0.5	0.05	21
BZX884B33	33	32.34	33.66	2	80	325	0.5	0.05	23.1
BZX884B36	36	35.28	36.72	2	90	350	0.5	0.05	25.2
BZX884B39	39	38.22	39.78	2	130	350	0.5	0.05	27.3
BZX884B43	43	42.14	43.86	2	150	375	0.5	0.05	30.1
BZX884B47	47	45.83	48.17	2	170	375	0.5	0.05	32.9
BZX884B51	51	49.73	52.27	2	180	400	0.5	0.05	35.7
BZX884B56	56	54.6	57.4	2	200	425	0.5	0.05	39.2
BZX884B62	62	60.45	63.55	2	215	450	0.5	0.05	43.4
BZX884B68	68	66.3	69.7	2	240	475	0.5	0.05	47.6
BZX884B75	75	73.13	76.87	2	255	500	0.5	0.05	52.5

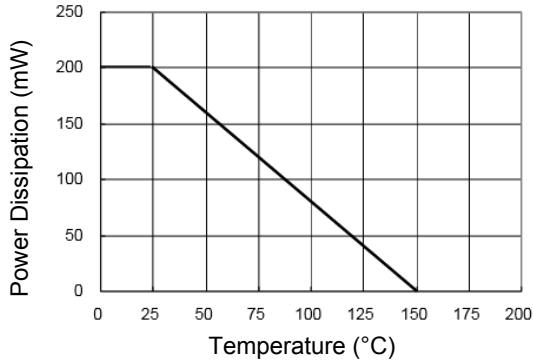
Note:

1. Pulse width = 10ms.

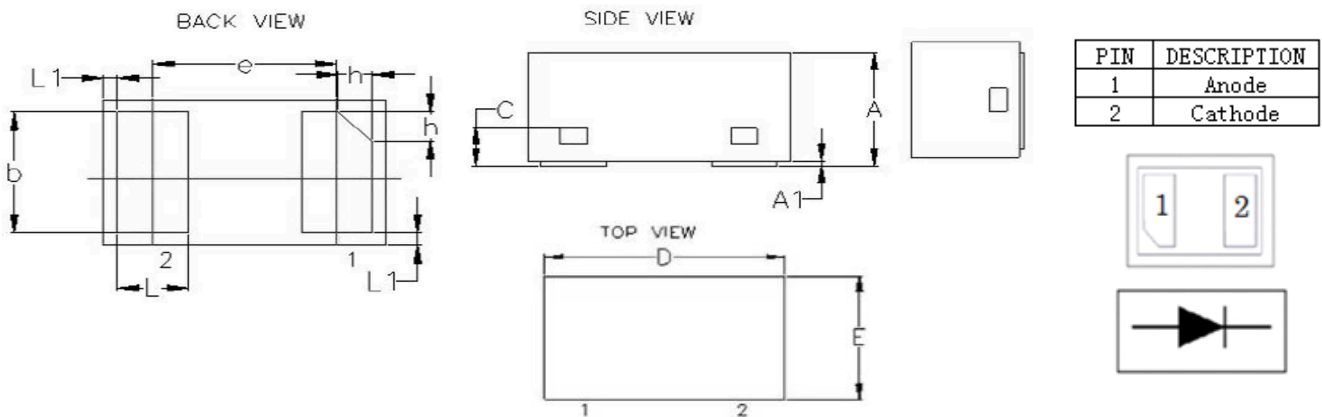
## Ratings and Characteristic Curves



## Ratings and Characteristic Curves



## Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.450	0.550	0.018	0.022
A1	0.000	0.050	0.000	0.002
b	0.450	0.550	0.018	0.022
C	0.120	0.180	0.005	0.007
D	0.950	1.050	0.037	0.041
e	0.65 BSC.		0.026 BSC.	
E	0.550	0.650	0.022	0.026
L	0.200	0.300	0.008	0.012
L1	0.05 REF.		0.002 REF.	
h	0.070	0.170	0.003	0.007

1. Lead Plating: Pb Free Solder
2. Lead Thickness Includes Solder Plating
3. Lead Frame: Copper A194
4. Other Tolerance:  $\pm 0.05$
5. Dimensions Are Exclusive of Burrs, Mold Flash and Tie Bar Extrusions
6. Unit: mm

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## **Order Information**

<b>Part Number</b>	<b>Package</b>	<b>Marking</b>	<b>Carrier</b>	<b>Quantity</b>
BZX884B2V4	DFN1006	A1	Tape & Reel	10,000 pcs / Reel
BZX884B2V7	DFN1006	A2	Tape & Reel	10,000 pcs / Reel
BZX884B3V0	DFN1006	A3	Tape & Reel	10,000 pcs / Reel
BZX884B3V3	DFN1006	A4	Tape & Reel	10,000 pcs / Reel
BZX884B3V6	DFN1006	A5	Tape & Reel	10,000 pcs / Reel
BZX884B3V9	DFN1006	A6	Tape & Reel	10,000 pcs / Reel
BZX884B4V3	DFN1006	A7	Tape & Reel	10,000 pcs / Reel
BZX884B4V7	DFN1006	A8	Tape & Reel	10,000 pcs / Reel
BZX884B5V1	DFN1006	A9	Tape & Reel	10,000 pcs / Reel
BZX884B5V6	DFN1006	AA	Tape & Reel	10,000 pcs / Reel
BZX884B6V2	DFN1006	AB	Tape & Reel	10,000 pcs / Reel
BZX884B6V8	DFN1006	AC	Tape & Reel	10,000 pcs / Reel
BZX884B7V5	DFN1006	AD	Tape & Reel	10,000 pcs / Reel
BZX884B8V2	DFN1006	AE	Tape & Reel	10,000 pcs / Reel
BZX884B9V1	DFN1006	AF	Tape & Reel	10,000 pcs / Reel
BZX884B10	DFN1006	AG	Tape & Reel	10,000 pcs / Reel
BZX884B11	DFN1006	AH	Tape & Reel	10,000 pcs / Reel
BZX884B12	DFN1006	AJ	Tape & Reel	10,000 pcs / Reel
BZX884B13	DFN1006	AK	Tape & Reel	10,000 pcs / Reel
BZX884B15	DFN1006	AL	Tape & Reel	10,000 pcs / Reel
BZX884B16	DFN1006	C1	Tape & Reel	10,000 pcs / Reel
BZX884B18	DFN1006	C2	Tape & Reel	10,000 pcs / Reel
BZX884B20	DFN1006	C3	Tape & Reel	10,000 pcs / Reel
BZX884B22	DFN1006	C4	Tape & Reel	10,000 pcs / Reel
BZX884B24	DFN1006	C5	Tape & Reel	10,000 pcs / Reel
BZX884B27	DFN1006	C6	Tape & Reel	10,000 pcs / Reel
BZX884B30	DFN1006	C7	Tape & Reel	10,000 pcs / Reel
BZX884B33	DFN1006	C8	Tape & Reel	10,000 pcs / Reel
BZX884B36	DFN1006	C9	Tape & Reel	10,000 pcs / Reel
BZX884B39	DFN1006	CA	Tape & Reel	10,000 pcs / Reel
BZX884B43	DFN1006	CB	Tape & Reel	10,000 pcs / Reel
BZX884B47	DFN1006	CC	Tape & Reel	10,000 pcs / Reel
BZX884B51	DFN1006	CD	Tape & Reel	10,000 pcs / Reel
BZX884B56	DFN1006	CE	Tape & Reel	10,000 pcs / Reel
BZX884B62	DFN1006	CF	Tape & Reel	10,000 pcs / Reel
BZX884B68	DFN1006	CG	Tape & Reel	10,000 pcs / Reel
BZX884B75	DFN1006	CH	Tape & Reel	10,000 pcs / Reel