

Features

- Ideally Suited for Automated Assembly Processes
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

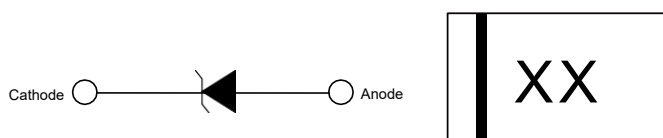
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance : 833°C/W Junction to Ambient

Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	150mW	Note 2
Maximum Forward Voltage	V_F	0.9V	$I_F=10mA$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

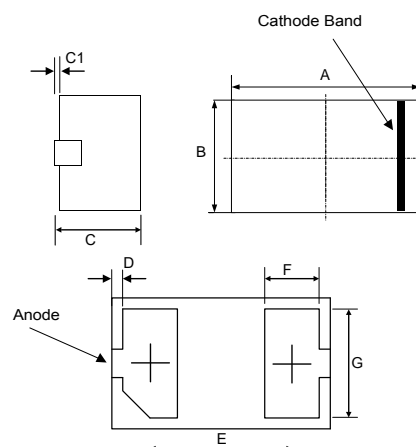
2. Device Mounted on FR-4 PCB with Minimum Recommended Pad Layout.

Internal Structure and Marking Code



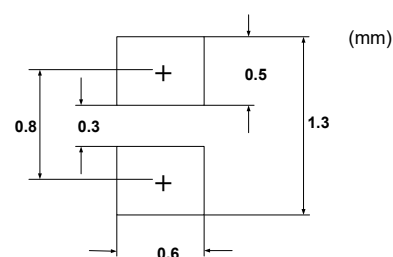
150 mW
Zener Diode
3.6 to 36 Volts

DFN1006-2L



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026BSC		0.65BSC		
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage ⁽³⁾				Maximum Zener Impedance ⁽⁴⁾			Maximum Reverse Current I_R @ V_R		Typical Temperature Coefficient @ I_{ZTC}		Test Current	Marking Code
	V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	V_R	mV/°C		I_{ZTC}	
	Min.(V)	Nom(V)	Max.(V)	mA	Ω		mA	μA	V	Min	Max.	mA	
BZT52B3V6L3P	3.53	3.6	3.67	5	95	600	1.0	15	1.0	-3.5	0	5	2W4
BZT52B3V9L3P	3.82	3.9	3.98	5	95	600	1.0	10	1.0	-3.5	0	5	2W5
BZT52B4V3L3P	4.21	4.3	4.39	5	95	600	1.0	5	1.0	-3.5	0	5	2W6
BZT52B4V7L3P	4.61	4.7	4.79	5	78	500	1.0	1	1.0	-3.5	0.2	5	2W7
BZT52B5V1L3P	5.0	5.1	5.2	5	60	480	1.0	0.1	0.8	-2.7	1.2	5	2W8
BZT52B5V6L3P	5.49	5.6	5.71	5	40	400	1.0	0.1	1.0	-2.0	2.5	5	2W9
BZT52B6V2L3P	6.08	6.2	6.32	5	10	150	1.0	0.1	2.0	0.4	3.7	5	2WA
BZT52B6V8L3P	6.66	6.8	6.94	5	8	80	1.0	0.1	3.0	1.2	4.5	5	2WB
BZT52B7V5L3P	7.35	7.5	7.65	5	7	80	1.0	0.1	5.0	2.5	5.3	5	2WC
BZT52B8V2L3P	8.04	8.2	8.36	5	7	80	1.0	0.1	6.0	3.2	6.2	5	2WD
BZT52B9V1L3P	8.92	9.1	9.28	5	10	100	1.0	0.1	6.8	3.8	7.0	5	2WE
BZT52B10L3P	9.8	10	10.2	5	15	150	1.0	0.1	7.5	4.5	8.0	5	2WF
BZT52B11L3P	10.78	11	11.22	5	20	150	1.0	0.1	8.2	5.4	9.0	5	2WG
BZT52B12L3P	11.76	12	12.24	5	20	150	1.0	0.1	9.0	6.0	10.0	5	2WH
BZT52B13L3P	12.74	13	13.26	5	26	170	1.0	0.1	9.7	7.0	11.0	5	2WI
BZT52B15L3P	14.7	15	15.3	5	30	200	1.0	0.1	11.0	9.2	13.0	5	2WJ
BZT52B16L3P	15.68	16	16.32	5	40	200	1.0	0.1	12	10.4	14.0	5	2WK
BZT52B18L3P	17.64	18	18.36	5	50	225	1.0	0.1	14.0	12.4	16.0	5	2WL
BZT52B20L3P	19.6	20	20.4	5	55	225	1.0	0.1	15.0	14.4	18.0	5	2WM
BZT52B22L3P	21.56	22	22.44	5	55	250	1.0	0.1	17.0	16.4	20.0	5	2WN
BZT52B24L3P	23.52	24	24.48	5	70	250	1.0	0.1	18.0	18.4	22.0	5	2WO
BZT52B27L3P	26.46	27	27.54	5	80	300	1.0	0.1	20.0	36.5	45.5	5	2WP
BZT52B30L3P	29.4	30	30.6	5	80	300	1.0	0.1	22	36.5	45.5	5	2WQ
BZT52B33L3P	32.34	33	33.66	5	80	325	1.0	0.1	24.0	36.5	45.5	5	2WR
BZT52B36L3P	35.28	36	36.72	5	90	350	1.0	0.1	27.0	36.5	45.5	5	2WS

Note: 3. Short Duration Pulse Test Used to Minimize Self-heating Effect.

4. $f=1\text{KHz}$

Curve Characteristics

Fig. 1 - Typical Zener Breakdown Characteristics

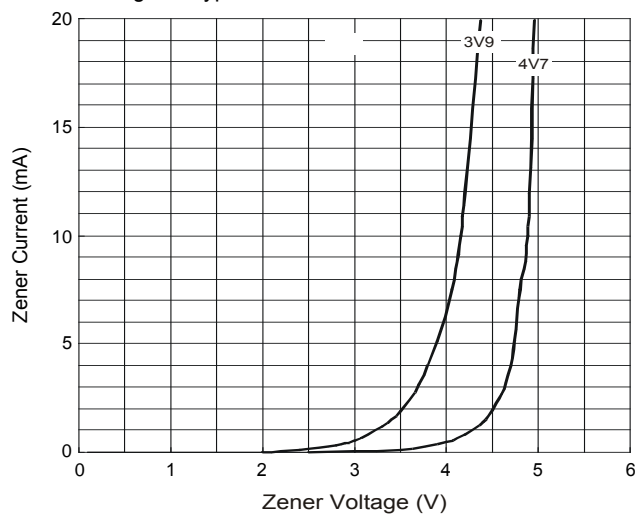


Fig. 2 - Typical Zener Breakdown Characteristics

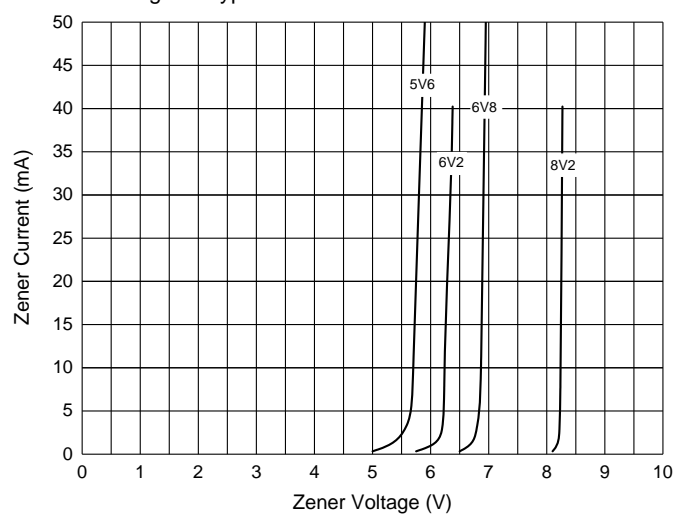


Fig. 3 - Typical Zener Breakdown Characteristics

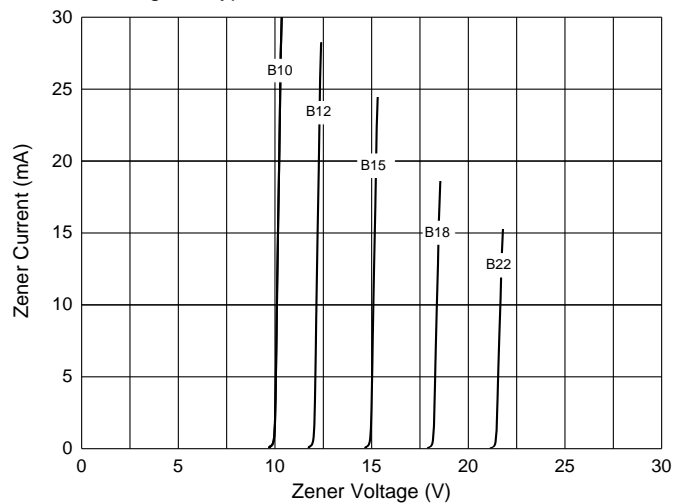


Fig. 4 - Typical Zener Breakdown Characteristics

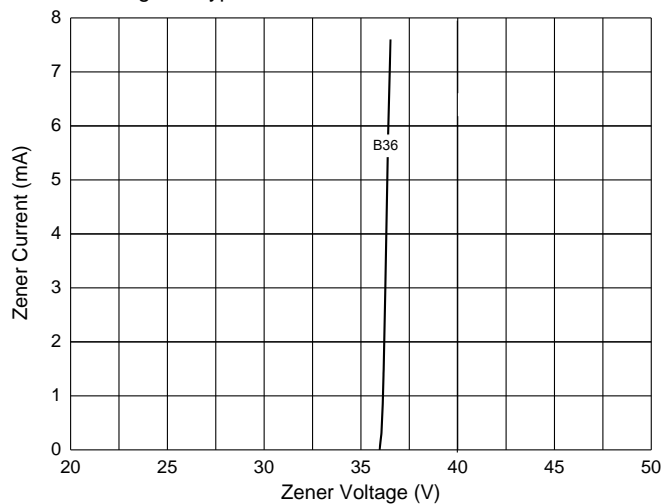


Fig. 5 - Typical Forward Characteristics

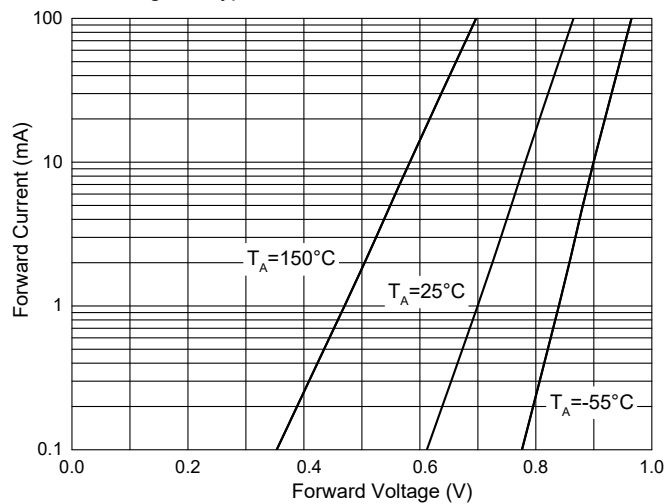
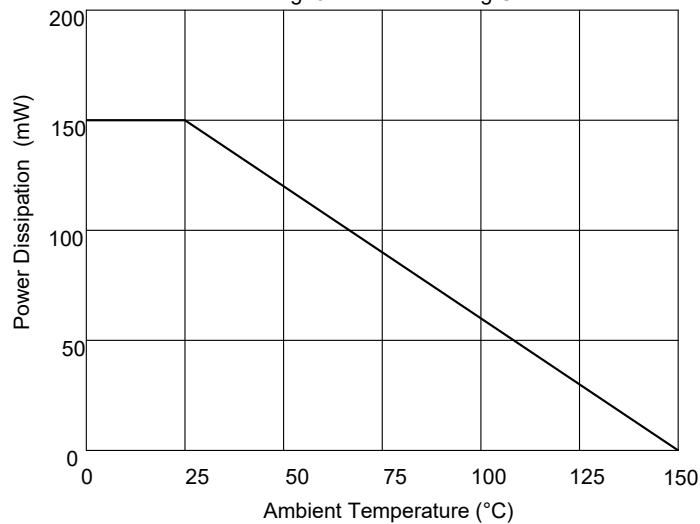


Fig. 6 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:10Kpcs/Reel

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