

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	$I_F=10mA$

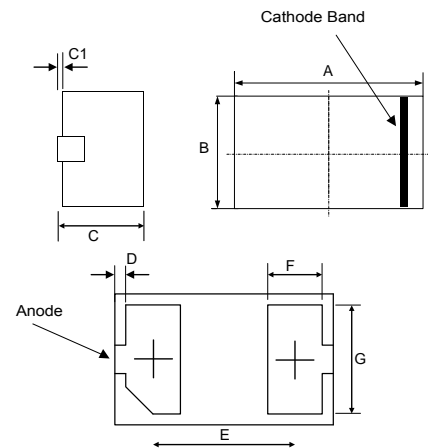
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. Device Mounted on FR-4 PCB with Minimum Recommended Pad Layout.

Internal Structure and Marking Code



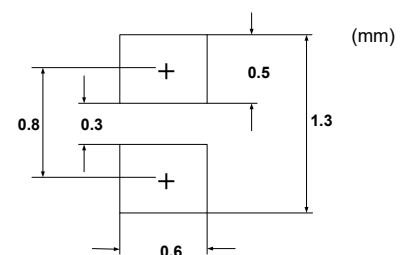
150 mW
Zener Diode
3.6 to 36 Volts

DFN1006-2L



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} mA	$Z_{ZT} @ I_{ZT}$ $Z_{ZK} @ I_{ZK}$ Ω	I_{ZK} mA	I_R μA	V_R V	mV/°C		I_{ZTC} mA		
	Min.(V)	Nom(V)	Max.(V)						Min	Max.			
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=1KHz

Curve Characteristics

Fig. 1 - Typical Zener Breakdown Characteristics

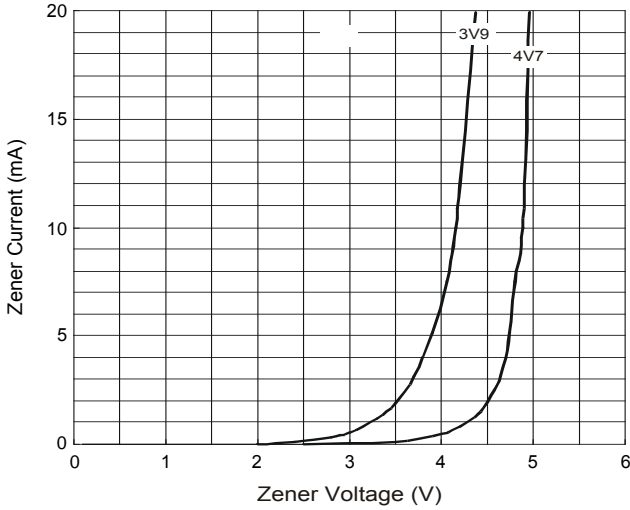


Fig. 2 - Typical Zener Breakdown Characteristics

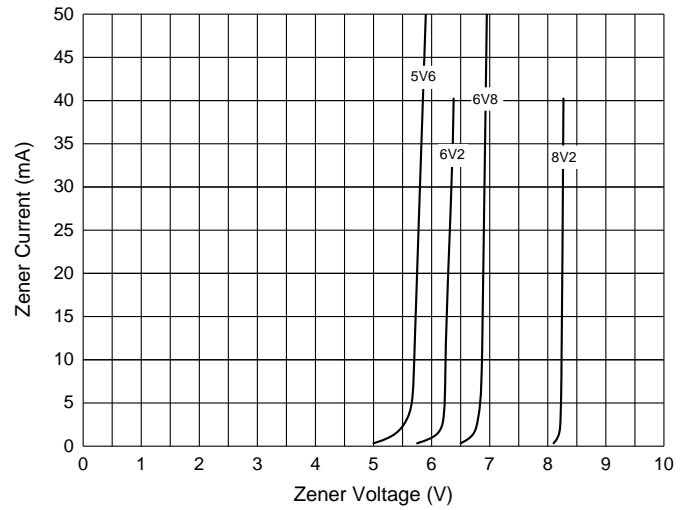


Fig. 3 - Typical Zener Breakdown Characteristics

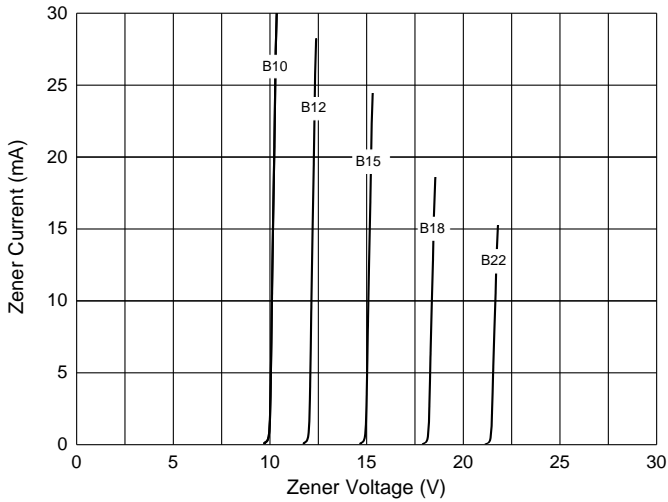


Fig. 4 - Typical Zener Breakdown Characteristics

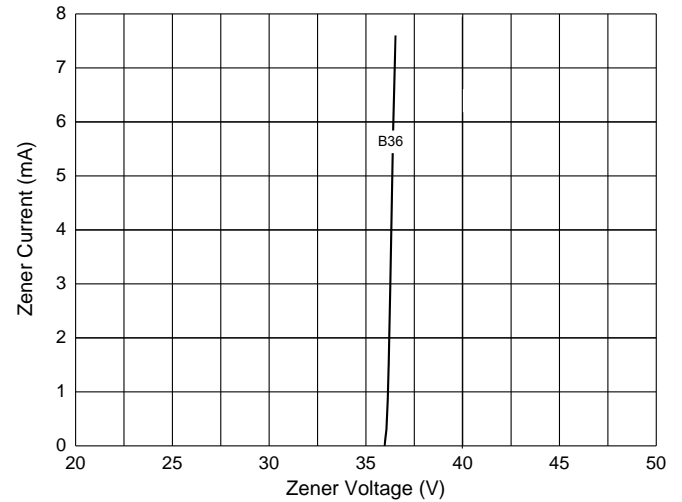


Fig. 5 - Typical Forward Characteristics

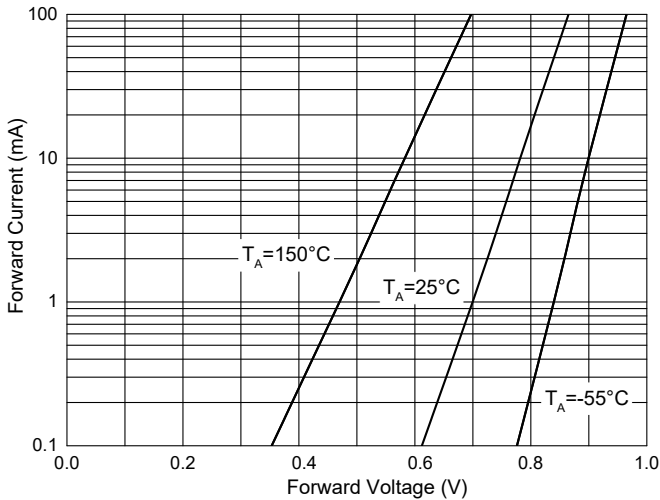
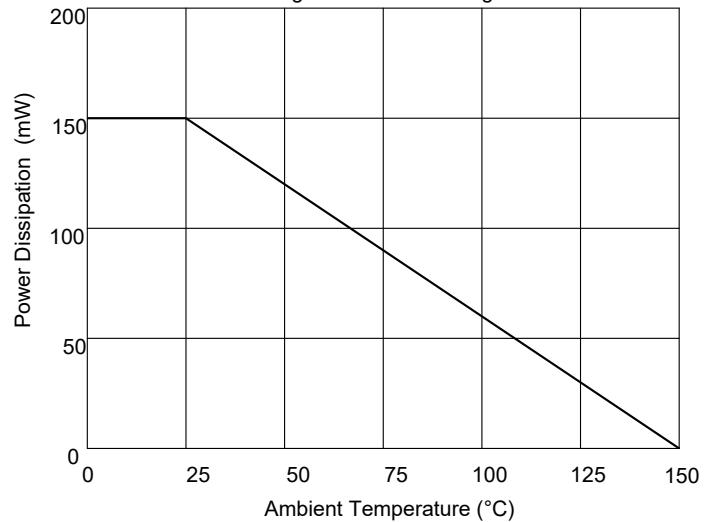


Fig. 6 - Power Derating Curve



Ordering Information

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.