

Features

- Planar Die Construction
- Zener Voltages from 2.4V - 39V
- 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

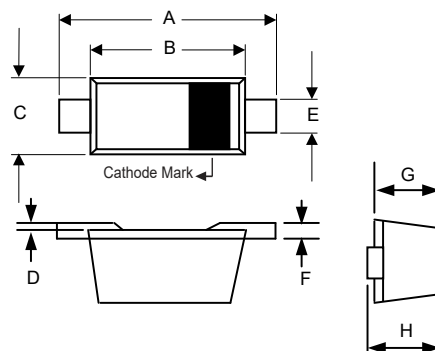
Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	150mW	Note 2
Maximum Forward Voltage	V_F	0.9V	$I_F=10mA$

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

Note: 2. Valid Provided That Device Terminals are Kept at Ambient Temperature.

**150 mWatt
Zener Diodes
2.4 to 39 Volts**

SOD-723



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.051	0.059	1.30	1.50	
B	0.035	0.043	0.90	1.10	
C	0.022	0.026	0.55	0.65	
D	0.001	0.003	0.01	0.07	
E	0.010	0.014	0.25	0.35	
F	0.003	0.006	0.08	0.15	
G	0.020	0.023	0.52	0.58	
H	0.021	0.026	0.53	0.65	

Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage ⁽³⁾			Maximum Zener Impedance ⁽⁴⁾		Maximum Zener Impedance ⁽⁴⁾		Maximum Reverse Current		Typical Temperature Coefficient @ I _{ZT}		Marking Code
	V _Z @ I _{ZT}			I _{ZT}	Z _{ZT}	I _{ZK}	Z _{ZK}	I _R	V _R	Min	Max.	
	Min.(V)	Nom(V)	Max.(V)	mA	Ω	mA	Ω	Max.(μA)	V	mV/°C		
BZX784C2V4	2.2	2.4	2.6	5	100	1.0	600	50	1.0	-3.5	0	Z1
BZX784C2V7	2.5	2.7	2.9	5	100	1.0	600	20	1.0	-3.5	0	Z2
BZX784C3V0	2.8	3.0	3.2	5	95	1.0	600	10	1.0	-3.5	0	Z3
BZX784C3V3	3.1	3.3	3.5	5	95	1.0	600	5	1.0	-3.5	0	Z4
BZX784C3V6	3.4	3.6	3.8	5	90	1.0	600	5	1.0	-3.5	0	Z5
BZX784C3V9	3.7	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0	Z6
BZX784C4V3	4.0	4.3	4.6	5	90	1.0	600	3	1.0	-3.5	0	Z7
BZX784C4V7	4.4	4.7	5.0	5	80	1.0	500	3	2.0	-3.5	0.2	X1
BZX784C5V1	4.8	5.1	5.4	5	60	1.0	480	2	2.0	-2.7	1.2	X2
BZX784C5V6	5.2	5.6	6.0	5	40	1.0	400	1	2.0	-2.0	2.5	X3
BZX784C6V2	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7	X4
BZX784C6V8	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5	X5
BZX784C7V5	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3	X6
BZX784C8V2	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2	X7
BZX784C9V1	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0	X8
BZX784C10	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0	X9
BZX784C11	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0	W1
BZX784C12	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0	W2
BZX784C13	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0	W3
BZX784C15	13.8	15	15.6	5	30	1.0	200	0.1	10.5	9.2	13.0	W4
BZX784C16	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0	W5
BZX784C18	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0	W6
BZX784C20	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0	W7
BZX784C22	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0	W8
BZX784C24	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0	W9
BZX784C27	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3	Y1
BZX784C30	28.0	30	32.0	2	80	0.5	300	0.1	21.0	24.4	29.4	Y2
BZX784C33	31.0	33	35.0	2	80	0.5	325	0.1	23.1	27.4	33.4	Y3
BZX784C36	34.0	36	38.0	2	90	0.5	350	0.1	25.2	30.4	37.4	Y4
BZX784C39	37.0	39	41.0	2	130	0.5	350	0.1	27.3	33.4	41.2	Y5

Note : 3. Tested with pulses, period = 5ms, pulse width=300us
4. f=1KHz.

Curve Characteristics

Fig. 1 - Power Derating Curve

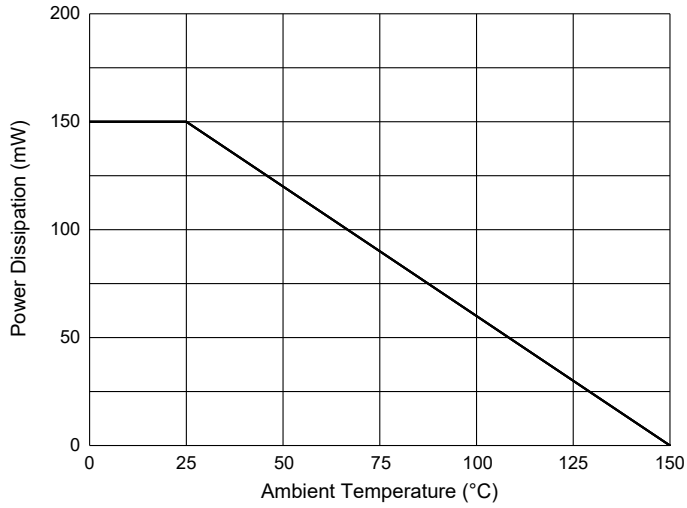


Fig. 2 - Typical Zener Breakdown Characteristics

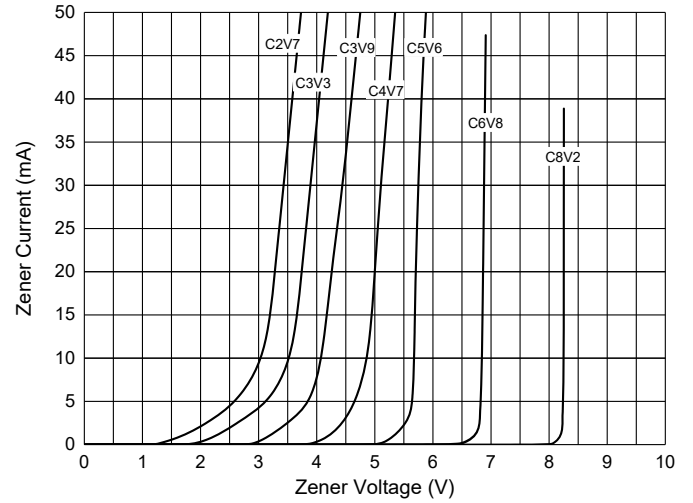
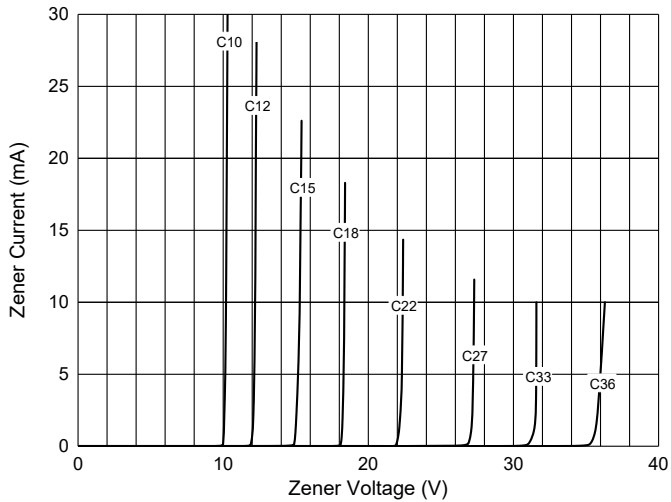


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:8Kpcs/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.

*****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.