

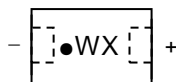


**BZT52C2V4LP
 THRU
 BZT52C39LP**

**100 mW
 Zener Diode
 2.4 to 39 Volts**

Features

- Ultra-Small Leadless Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Ideally Suited for Automated Assembly Processes
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"



Absolute Maximum Ratings

Symbol	Rating	Rating	Unit
P _D	Power dissipation	100	mW
T _J	Junction Temperature	-65 to +150	°C
T _{STG}	Storage Temperature Range	-65 to +150	°C

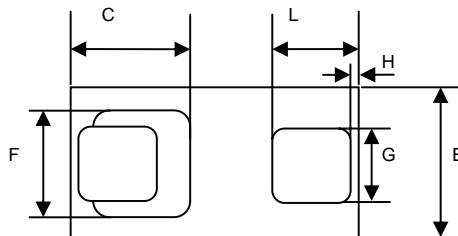
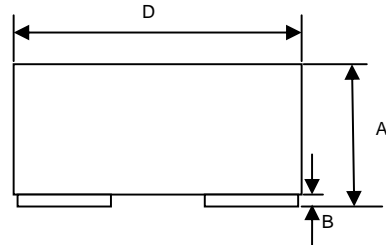
Absolute Maximum Ratings

Symbol	Rating	Rating	Unit
R _{thJA}	Thermal Resistance Junction to Ambient	1250	°C/W

Electrical Characteristics

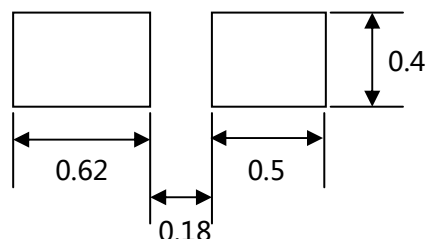
Symbol	Rating	Rating	Unit
V _F	Maximum Forward Voltage (I _F =10mA _{dc})	0.9	V

SOD-882



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.003	0.01	0.07	
C	0.019 REF.		0.470 REF.		
D	0.037	0.041	0.95	1.05	
E	0.022	0.026	0.55	0.65	
F	0.017 REF.		0.420 REF.		
G	0.011	0.015	0.27	0.37	
H	0.001 REF.		0.030 REF.		
L	0.013	0.017	0.34	0.44	

Suggested Solder Pad Layout (mm)



ELECTRICAL CHARACTERISTICS @25°C

Type Number	Marking Code	ZENER VOLTAGE ⁽¹⁾				Maximum Zener Impedance ⁽²⁾			Maximum Reverse Current I_R (Max) @ V_R		Typical Temperature Coefficient @ I_{ZTC} mV/°C		Test Current I_{ZTC} mA
		V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	V_R	Min	Max.	
		Min.	Nom	Max.	mA	Ω	mA	μ A	V				
BZT52C2V4LP	WX	2.2	2.4	2.6	5	100	600	1.0	50	1.0	-3.5	0	5
BZT52C2V7LP	W1	2.5	2.7	2.9	5	100	600	1.0	20	1.0	-3.5	0	5
BZT52C3V0LP	W2	2.8	3.0	3.2	5	95	600	1.0	10	1.0	-3.5	0	5
BZT52C3V3LP	W3	3.1	3.3	3.5	5	95	600	1.0	5	1.0	-3.5	0	5
BZT52C3V6LP	W4	3.4	3.6	3.8	5	90	600	1.0	5	1.0	-3.5	0	5
BZT52C3V9LP	W5	3.7	3.9	4.1	5	90	600	1.0	3	1.0	-3.5	0	5
BZT52C4V3LP	W6	4.0	4.3	4.6	5	90	600	1.0	3	1.0	-3.5	0	5
BZT52C4V7LP	W7	4.4	4.7	5.0	5	80	500	1.0	3	2.0	-3.5	0.2	5
BZT52C5V1LP	9Y	4.8	5.1	5.4	5	60	480	1.0	2	2.0	-2.7	1.2	5
BZT52C5V6LP	9A	5.2	5.6	6.0	5	40	400	1.0	1	2.0	-2.0	2.5	5
BZT52C6V2LP	9B	5.8	6.2	6.6	5	10	150	1.0	3	4.0	0.4	3.7	5
BZT52C6V8LP	9C	6.4	6.8	7.2	5	15	80	1.0	2	4.0	1.2	4.5	5
BZT52C7V5LP	9D	7.0	7.5	7.9	5	15	80	1.0	1	5.0	2.5	5.3	5
BZT52C8V2LP	9E	7.7	8.2	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5
BZT52C9V1LP	9F	8.5	9.1	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5
BZT52C10LP	9G	9.4	10	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0	5
BZT52C11LP	9H	10.4	11	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0	5
BZT52C12LP	9J	11.4	12	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5
BZT52C13LP	9K	12.4	13	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0	5
BZT52C15LP	9L	13.8	15	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0	5
BZT52C16LP	9M	15.3	16	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0	5
BZT52C18LP	9N	16.8	18	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0	5
BZT52C20LP	9P	18.8	20	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0	5
BZT52C22LP	9R	20.8	22	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0	5
BZT52C24LP	9S	22.8	24	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0	5
BZT52C36LP	9W	34	36	38	2	90	350	0.5	0.1	25.2	36.5	45.5	5
BZT52C39LP	9X	37	39	41	2	130	350	0.5	0.1	27.3	36.8	49.8	5

(1) Short duration pulse test used to minimize self-heating effect.

(2) f=1KHz

Typical characteristics

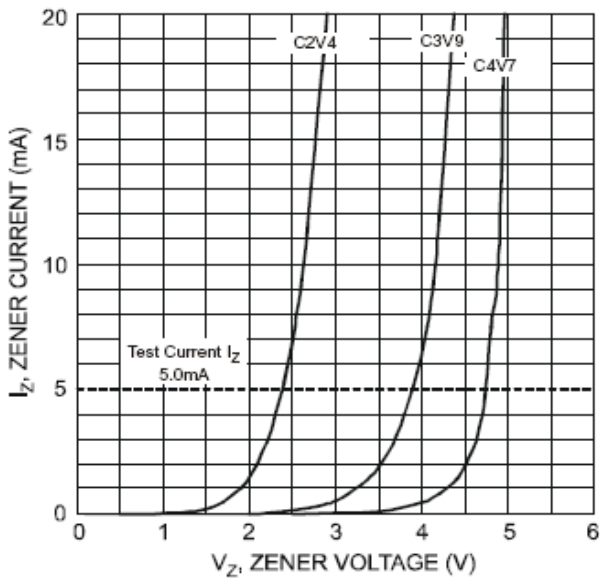


Fig. 1 Typical Zener Breakdown Characteristics

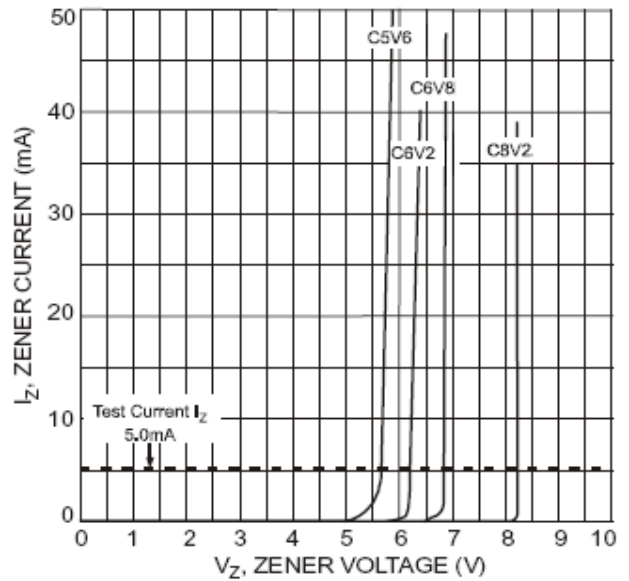


Fig. 2 Typical Zener Breakdown Characteristics

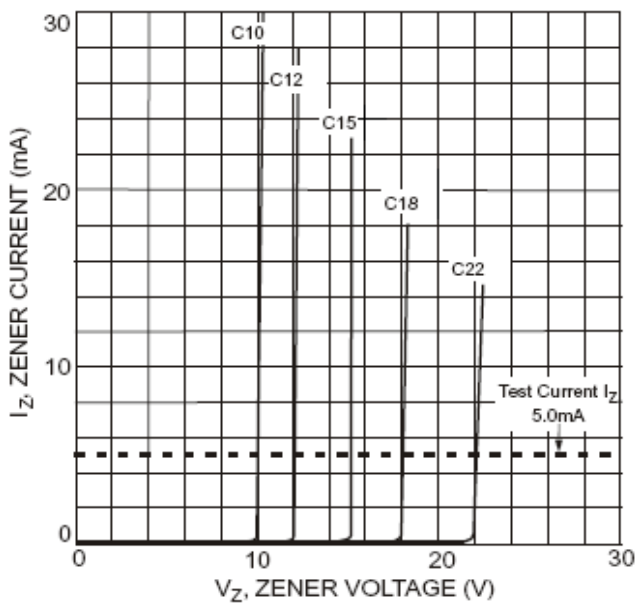


Fig. 3 Typical Zener Breakdown Characteristics

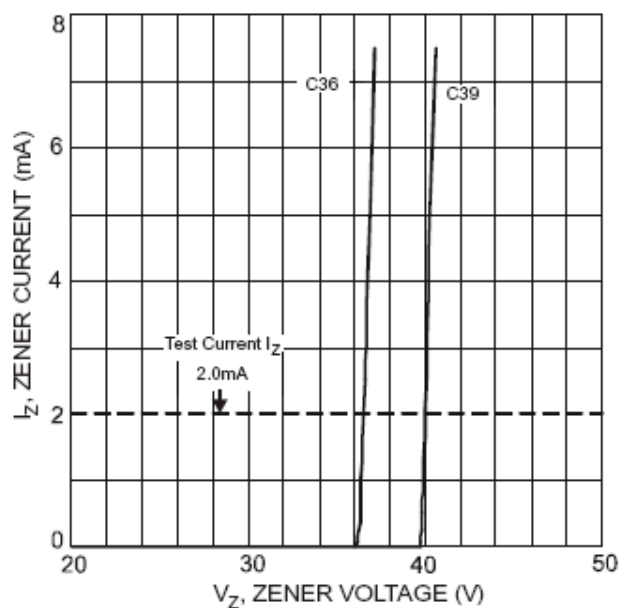
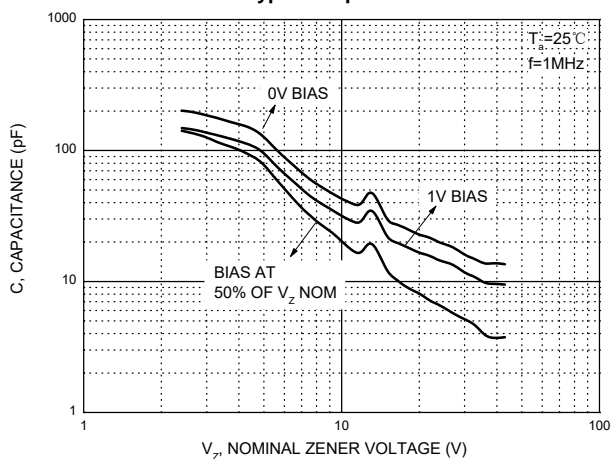


Fig. 4 Typical Zener Breakdown Characteristics

Typical Capacitance





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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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