Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BZX84C2V4 THRU BZX84C51

Silicon

350 mWatt

Zener Diodes

Features

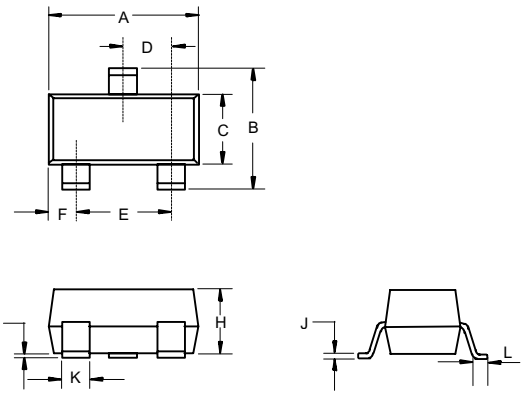
- Planar Die construction
- 350mW Power Dissipation
- Zener Voltages from 2.4V - 51V
- Ideally Suited for Automated Assembly Processes

.

Mechanical Data

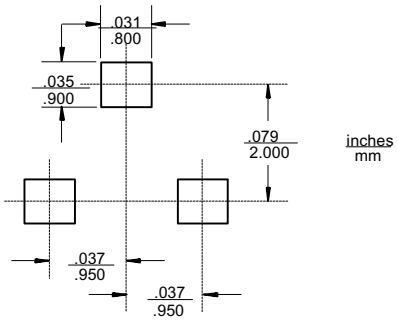
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Weight: 0.008 grams (approx.)

SOT-23



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	
L	.007	.020	.20	.50	

Suggested Solder Pad Layout



Maximum Ratings @ 25°C Unless Otherwise Specified

Maximum Forward Voltage@IF=10mA	V_F	0.9	V
Power Dissipation (NoteA)	$P_{(AV)}$	350	mWatt
Operation And Storage Temperature	T_J, T_{STG}	-55°C to +150°C	
Peak Forward Surge Current(NoteB)	I_{FSM}	2.0	A
Thermal Resistance (Note C)	Rthja	357	°C/W

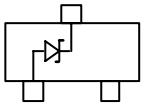
NOTES:

A. Mounted on 5.0mm2(.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

C. Valid provided the terminals are kept at ambient temperature

*Pin Configuration - Top View



BZX84C2V4 thru BZX84C51

Micro Commercial Components

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Part Number	Marking	Nominal Zener Voltage			Max. Zener Impedance				Max.Reverse Leakage Current	
		Vz(V) @ I_{ZT}			Z_{ZT} @ I_{ZT}		Z_{ZK} @ I_{ZK}		IR @ VR	
		Nom.	Min.	Max.	Ohm	mA	Ohm	mA	μA	V
BZX84C2V4	W1/Z11	2.4	2.28	2.52	100	5	600	1	50	1.0
BZX84C2V7	W2/Z12	2.7	2.5	2.9	100	5	600	1	20	1.0
BZX84C3V0	W3/Z13	3	2.8	3.2	95	5	600	1	10	1.0
BZX84C3V3	W4/Z14	3.3	3.1	3.5	95	5	600	1	5	1.0
BZX84C3V6	W5/Z15	3.6	3.4	3.8	90	5	600	1	5	1.0
BZX84C3V9	W6/Z16	3.9	3.7	4.1	90	5	600	1	3	1.0
BZX84C4V3	W7/Z17	4.3	4	4.6	90	5	600	1	3	1.0
BZX84C4V7	W8/Z1	4.7	4.4	5	80	5	500	1	3	2.0
BZX84C5V1	W9/Z2	5.1	4.8	5.4	60	5	480	1	2	2.0
BZX84C5V6	WA/Z3	5.6	5.2	6	40	5	400	1	1	2.0
BZX84C6V2	WB/Z4	6.2	5.8	6.6	10	5	150	1	3	4.0
BZX84C6V8	WC/Z5	6.8	6.4	7.2	15	5	80	1	2	4.0
BZX84C7V5	WD/Z6	7.5	7	7.9	15	5	80	1	1	5.0
BZX84C8V2	WE/Z7	8.2	7.7	8.7	15	5	80	1	0.7	5.0
BZX84C9V1	WF/Z8	9.1	8.5	9.6	15	5	100	1	0.5	6.0
BZX84C10	WG/Z9	10	9.4	10.6	20	5	150	1	0.2	7.0
BZX84C11	WH/Y1	11	10.4	11.6	20	5	150	1	0.1	8.0
BZX84C12	WI/Y2	12	11.4	12.7	25	5	150	1	0.1	8.0
BZX84C13	WK/Y3	13	12.4	14.1	30	5	170	1	0.1	8.0
BZX84C15	WL/Y4	15	13.8	15.6	30	5	200	1	0.1	10.5
BZX84C16	WM /Y5	16	15.3	17.1	40	5	200	1	0.1	11.2
BZX84C18	WN/Y6	18	16.8	19.1	45	5	225	1	0.1	12.6
BZX84C20	WO/Y7	20	18.8	21.2	55	5	225	1	0.1	14.0
BZX84C22	WP/Y8	22	20.8	23.3	55	5	250	1	0.1	15.4
BZX84C24	WR/Y9	24	22.8	25.6	70	5	250	1	0.1	16.8
BZX84C27	WS/Y10	27	25.1	28.9	80	2	300	1	0.1	18.9
BZX84C30	WT /Y11	30	28	32	80	2	300	1	0.1	21.0
BZX84C33	WU/Y12	33	31	35	80	2	325	1	0.1	23.1
BZX84C36	WW/Y13	36	34	38	90	2	350	1	0.1	25.2
BZX84C39	WX/Y14	39	37	41	130	2	350	1	0.1	27.3
BZX84C43	WY	43	40.85	45.15	150	5	375	1	0.1	30.10
BZX84C47	WZ	47	44.65	49.35	170	5	375	1	0.1	32.90
BZX84C51	XA	51	48.45	53.55	100	5	400	1	0.1	35.70

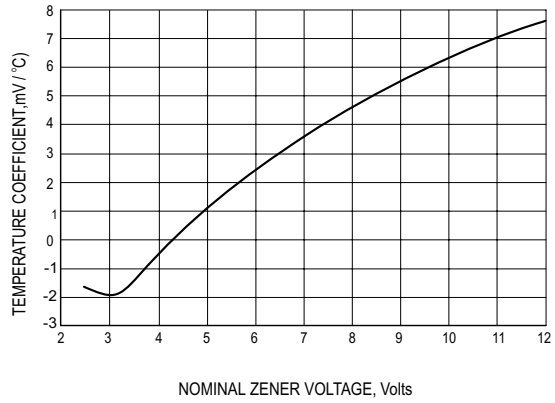
NOTE:

1.Standard zener voltage tolerance is +/- 5% with a 'C' suffix from BZX84C2V4~BZX84C51 , suffix 'B' is +/- 2% tolerance from BZX84B4V3~BZX84B39.

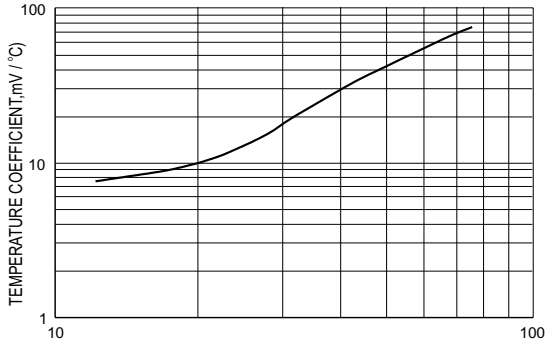
2.Zener Voltage (Vz) Measurement. Guarantees the zener voltage when measured at 90 seconds while maintaining the lead temperature (TL) AT 30 °C,from the diode body.

3.Zener Impedance (Zz) Derivation. The zener impedance os dervied from the 60 cycle ac voltage, which results when an AC current having an rms value equal to 10% of the dc zener current (Izt or Izk) is superimposed on Izt or Izk.

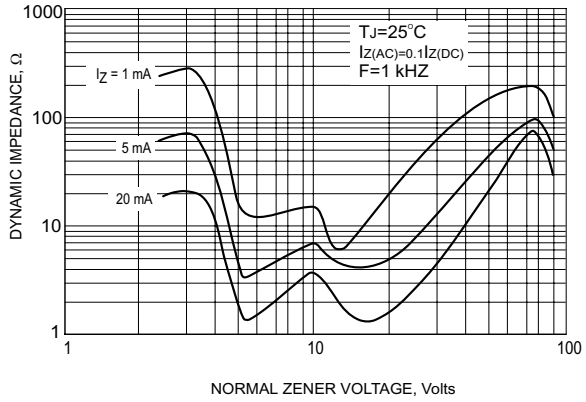
4.Surge Current (IR) Non-Repetitive. The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, Izt, per JEDEC registration; however, actual device capability is as described in Figure 5.



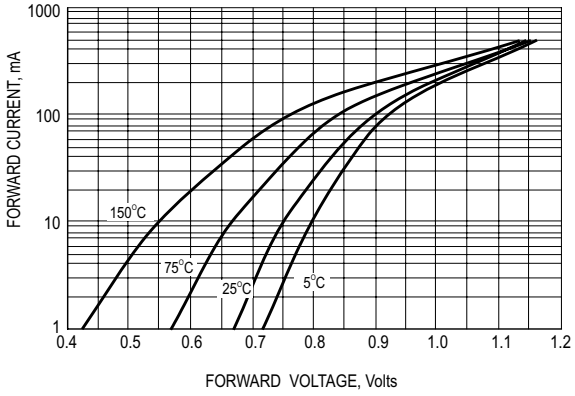
TYPICAL REVERSE CURRENT



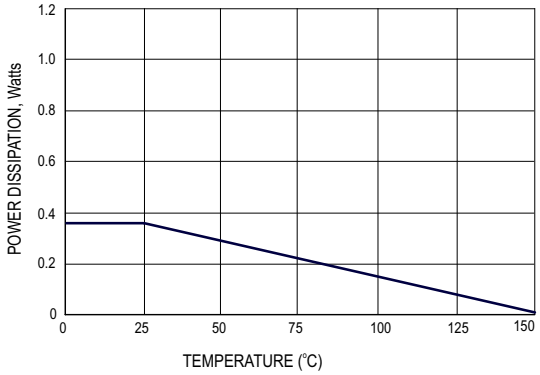
TEMPERATURE COEFFICIENTS



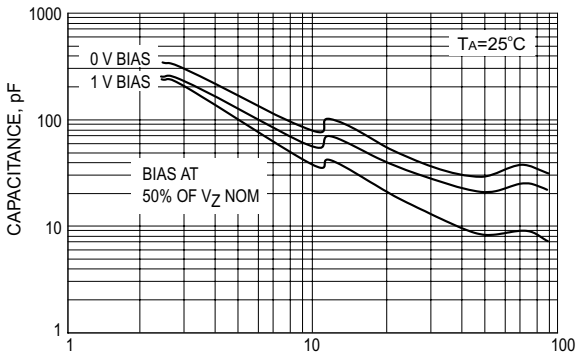
EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE



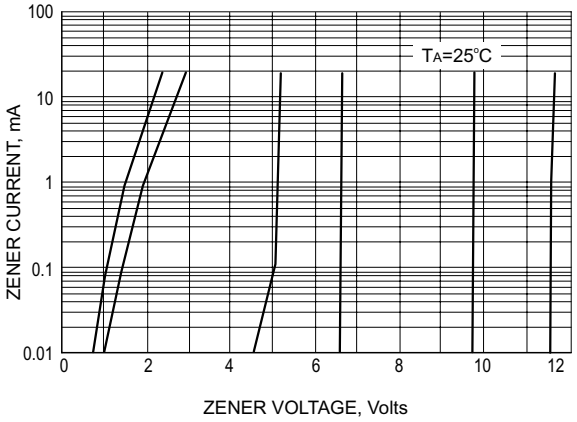
TYPICAL FORWARD VOLTAGE



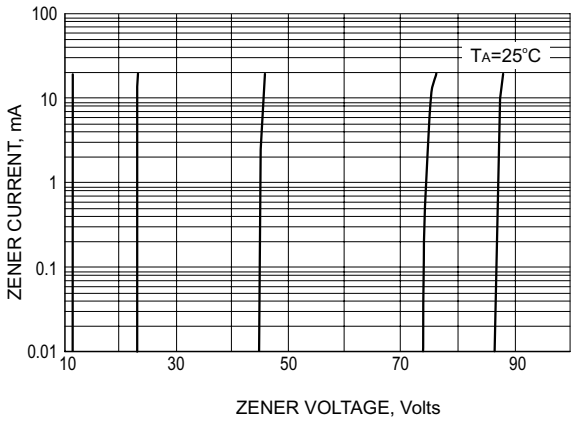
STEADY STATE POWER DERATING



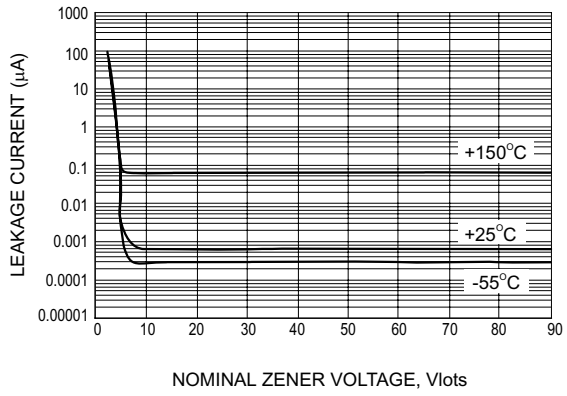
TYPICAL CAPACITANCE



ZENER VOLTAGE V.S. ZENER CURRENT



ZENER VOLTAGE V.S. ZENER CURRENT



TYPICAL LEAKGE CURRENT

Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/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.
APPLICATIONS DISCLAIMER
Products offer by ***Micro Commercial Components Corp***. are not intended for use in Medical, Aerospace or Military Applications.