

**BZX84C2V4
THRU
BZX84C47**

**SURFACE MOUNT
SILICON ZENER DIODE
350mW, 2.4 THRU 47 VOLTS**



SOT-23 CASE



www.centra-semi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BZX84C2V4 Series are surface mount silicon Zener diodes. These high quality voltage regulating diodes are designed for use in industrial, commercial, entertainment and computer applications.

MARKING CODE: SEE ELECTRICAL CHARACTERISTICS TABLE

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Power Dissipation

Operating and Storage Junction Temperature

Thermal Resistance

SYMBOL

P_D

T_J, T_{stg}

θ_{JA}

350

-65 to +150

357

UNITS

mW

$^\circ\text{C}$

$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE V _Z @ I _{ZT}			TEST CURRENT I _{ZT}	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT I _{ZM}	MAXIMUM ZENER VOLTAGE TEMP. COEFF. θV _Z	MARKING CODE
	MIN	NOM	MAX		Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ V _R				
	V	V	V		Ω	Ω	mA	μA	V			
BZX84C2V4	2.2	2.4	2.6	5.0	100	600	1.0	50	1.0	104	-0.06	W3
BZX84C2V7	2.5	2.7	2.9	5.0	100	600	1.0	20	1.0	92	-0.06	W4
BZX84C3V0	2.8	3.0	3.2	5.0	95	600	1.0	10	1.0	83	-0.06	W5
BZX84C3V3	3.1	3.3	3.5	5.0	95	600	1.0	5.0	1.0	76	-0.06	W6
BZX84C3V6	3.4	3.6	3.8	5.0	90	600	1.0	5.0	1.0	69	-0.06	W7
BZX84C3V9	3.7	3.9	4.1	5.0	90	600	1.0	3.0	1.0	64	-0.06	W8
BZX84C4V3	4.0	4.3	4.6	5.0	90	600	1.0	3.0	1.0	58	-0.05	W9
BZX84C4V7	4.4	4.7	5.0	5.0	80	500	1.0	3.0	2.0	53	-0.03	Z1
BZX84C5V1	4.8	5.1	5.4	5.0	60	480	1.0	2.0	2.0	49	0.02	Z2
BZX84C5V6	5.2	5.6	6.0	5.0	40	400	1.0	1.0	2.0	45	0.03	Z3
BZX84C6V2	5.8	6.2	6.6	5.0	10	150	1.0	3.0	4.0	40	0.04	Z4
BZX84C6V8	6.4	6.8	7.2	5.0	15	80	1.0	2.0	4.0	37	0.05	Z5
BZX84C7V5	7.0	7.5	7.9	5.0	15	80	1.0	1.0	5.0	33	0.05	Z6
BZX84C8V2	7.7	8.2	8.7	5.0	15	80	1.0	0.7	5.0	30	0.06	Z7
BZX84C9V1	8.5	9.1	9.6	5.0	15	100	1.0	0.5	6.0	27	0.06	Z8
BZX84C10	9.4	10	10.6	5.0	20	150	1.0	0.2	7.0	25	0.07	Z9

Tolerance Code

A

B

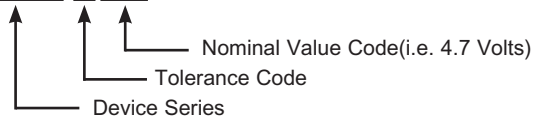
Tolerance

$\pm 1\%$

$\pm 2\%$

Part Number Identification

BZX84 C 4V7



R7 (20-November 2009)

**BZX84C2V4
THRU
BZX84C47**

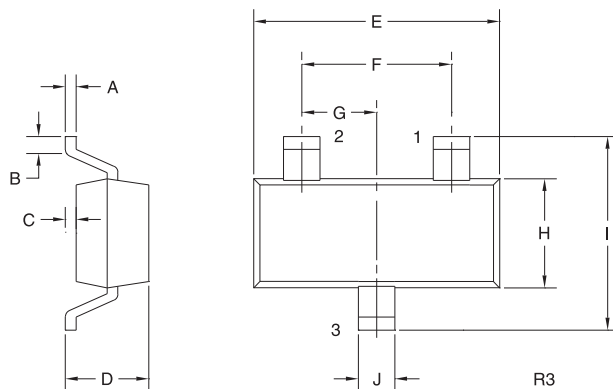
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE V _Z @ I _{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM ZENER VOLTAGE TEMP. COEFF.	MARKING CODE
	MIN	NOM	MAX	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ V _R	I _{ZM}	θV _Z		
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °C	
BZX84C11	10.4	11	11.6	5.0	20	150	1.0	0.1	8.0	23	0.07	Y1
BZX84C12	11.4	12	12.7	5.0	25	150	1.0	0.1	8.0	21	0.07	Y2
BZX84C13	12.4	13	14.1	5.0	30	170	1.0	0.1	8.0	19	0.08	Y3
BZX84C15	13.8	15	15.6	5.0	30	200	1.0	0.05	10.5	17	0.08	Y4
BZX84C16	15.3	16	17.1	5.0	40	200	1.0	0.05	11.2	16	0.08	Y5
BZX84C18	16.8	18	19.1	5.0	45	225	1.0	0.05	12.6	14	0.08	Y6
BZX84C20	18.8	20	21.2	5.0	55	225	1.0	0.05	14.0	12	0.08	Y7
BZX84C22	20.8	22	23.3	5.0	55	250	1.0	0.05	15.4	11	0.09	Y8
BZX84C24	22.8	24	25.6	5.0	70	250	1.0	0.05	16.8	10	0.09	Y9
BZX84C27	25.1	27	28.9	2.0	80	300	0.5	0.05	18.9	9	0.09	Y10
BZX84C30	28.0	30	32.0	2.0	80	300	0.5	0.05	21.0	8	0.09	Y11
BZX84C33	31.0	33	35.0	2.0	80	325	0.5	0.05	23.1	7	0.09	Y12
BZX84C36	34.0	36	38.0	2.0	90	350	0.5	0.05	25.2	6.9	0.09	Y13
BZX84C39	37.0	39	41.0	2.0	130	350	0.5	0.05	27.3	6.4	0.09	Y14
BZX84C43	40.0	43	46.0	2.0	150	375	0.5	0.05	30.1	5.8	0.10	Y15
BZX84C47	44.0	47	50.0	2.0	170	375	0.5	0.05	32.9	5.3	0.10	Y16

SOT-23 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

LEAD CODE:

- 1) ANODE
- 2) NO CONNECTION
- 3) CATHODE

R7 (20-November 2009)