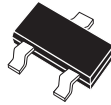


**BZX84C2V4
THRU
BZX84C47**

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



SOT-23 CASE

Central™
Semiconductor Corp.

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 MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE

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

Power Dissipation
Operating and Storage Temperature
Thermal Resistance

SYMBOL

P_D 350
 T_J, T_{stg} -65 to +150
 θ_{JA} 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 NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT mA	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT I_{ZM} mA	MAXIMUM ZENER VOLTAGE TEMP. COEFF. θ_{VZ} %/ $^\circ\text{C}$	MARKING CODE
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		μA	VOLTS			
	VOLTS	VOLTS	VOLTS		Ω	Ω	mA	μA	VOLTS			
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	8.9	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

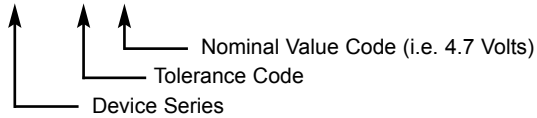
A
B

Tolerance

$\pm 1\%$
 $\pm 2\%$

Part Number Identification

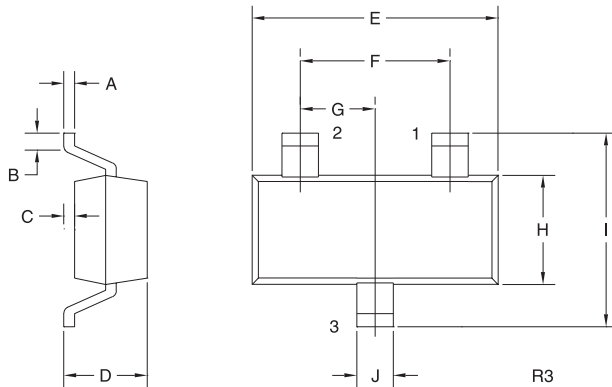
B Z X 84 C 4 V 7



R5 (30-March 2004)

TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT mA	MAXIMUM ZENER IMPEDENCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT mA	MAXIMUM ZENER VOLTAGE TEMP. COEFF. %/ °C	MARKING CODE
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$				
	VOLTS	VOLTS	VOLTS		Ω	Ω	mA	μA	VOLTS			
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			
	INCHES		MILLIMETERS	
	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

R5 (30-March 2004)