

BZX84B2V4 THRU BZX84B47

**SURFACE MOUNT
SILICON ZENER DIODE
350mW, 2.4 THRU 47 VOLT
2% TOLERANCE**

**SOT-23 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BZX84B2V4 series are surface mount silicon, tight tolerance Zener diodes. These high quality voltage regulating diodes are designed for use in industrial, commercial, entertainment and computer applications.

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 Impedance			Maximum Reverse Current		Maximum Zener Current I_{ZM}	Maximum Temperature Coefficient 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		% / $^{\circ}\text{C}$	
BZX84B2V4	2.352	2.4	2.448	5.0	100	600	1.0	50	1.0	104	-0.06	*
BZX84B2V7	2.646	2.7	2.754	5.0	100	600	1.0	20	1.0	92	-0.06	*
BZX84B3V0	2.940	3.0	3.060	5.0	95	600	1.0	10	1.0	83	-0.06	*
BZX84B3V3	3.234	3.3	3.366	5.0	95	600	1.0	5.0	1.0	76	-0.06	*
BZX84B3V6	3.528	3.6	3.672	5.0	90	600	1.0	5.0	1.0	69	-0.06	*
BZX84B3V9	3.822	3.9	3.978	5.0	90	600	1.0	3.0	1.0	64	-0.06	*
BZX84B4V3	4.214	4.3	4.386	5.0	90	600	1.0	3.0	1.0	58	-0.05	*
BZX84B4V7	4.606	4.7	4.794	5.0	80	500	1.0	3.0	2.0	53	-0.03	*
BZX84B5V1	4.998	5.1	5.202	5.0	60	480	1.0	2.0	2.0	49	0.02	*
BZX84B5V6	5.488	5.6	5.712	5.0	40	400	1.0	1.0	2.0	45	0.03	*
BZX84B6V2	6.076	6.2	6.324	5.0	10	150	1.0	3.0	4.0	40	0.04	*
BZX84B6V8	6.664	6.8	6.936	5.0	15	80	1.0	2.0	4.0	37	0.05	*
BZX84B7V5	7.350	7.5	7.650	5.0	15	80	1.0	1.0	5.0	33	0.05	*
BZX84B8V2	8.036	8.2	8.364	5.0	15	80	1.0	0.7	5.0	30	0.06	*
BZX84B9V1	8.918	9.1	9.282	5.0	15	100	1.0	0.5	6.0	27	0.06	*
BZX84B10	9.800	10	10.20	5.0	20	150	1.0	0.2	7.0	25	0.07	*
BZX84B11	10.78	11	11.22	5.0	20	150	1.0	0.1	8.0	23	0.07	*
BZX84B12	11.76	12	12.24	5.0	25	150	1.0	0.1	8.0	21	0.07	*
BZX84B13	12.74	13	13.26	5.0	30	170	1.0	0.1	8.0	19	0.08	*
BZX84B15	14.70	15	15.30	5.0	30	200	1.0	0.05	10.5	17	0.08	*

* Consult Factory

R0 (2-March 2020)

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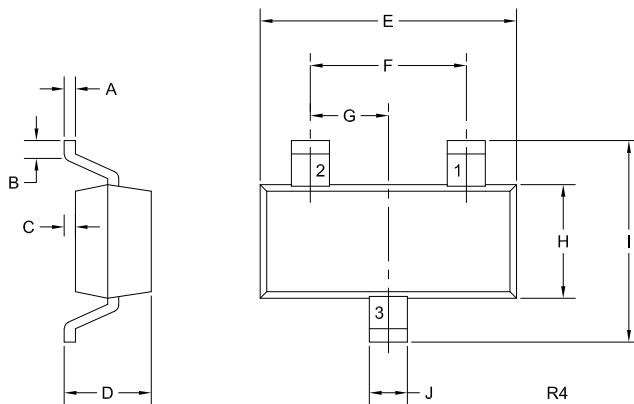
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

Type	Zener Voltage V _Z @ I _{ZT}			Test Current	Maximum Zener Impedance			Maximum Reverse Current		Maximum Zener Current	Maximum Temperature Coefficient	Marking Code
	MIN	NOM	MAX		I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _R @ V _R				
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °C	
BZX84B16	15.68	16	16.32	5.0	40	200	1.0	0.05	11.2	16	0.08	*
BZX84B18	17.64	18	18.36	5.0	45	225	1.0	0.05	12.6	14	0.08	*
BZX84B20	19.60	20	20.40	5.0	55	225	1.0	0.05	14.0	12	0.08	*
BZX84B22	21.56	22	22.44	5.0	55	250	1.0	0.05	15.4	11	0.09	*
BZX84B24	23.52	24	24.48	5.0	70	250	1.0	0.05	16.8	10	0.09	*
BZX84B27	26.46	27	27.54	2.0	80	300	0.5	0.05	18.9	9	0.09	*
BZX84B30	29.40	30	30.60	2.0	80	300	0.5	0.05	21.0	8	0.09	*
BZX84B33	32.34	33	33.66	2.0	80	325	0.5	0.05	23.1	7	0.09	*
BZX84B36	35.28	36	36.72	2.0	90	350	0.5	0.05	25.2	6.9	0.09	*
BZX84B39	38.22	39	39.78	2.0	130	350	0.5	0.05	27.3	6.4	0.09	*
BZX84B43	42.14	43	43.86	2.0	150	375	0.5	0.05	30.1	5.8	0.10	*
BZX84B47	46.06	47	47.94	2.0	170	375	0.5	0.05	32.9	5.3	0.10	*

* Consult Factory

SOT-23 CASE - MECHANICAL OUTLINE

DIMENSIONS				
SYMBOL	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	0.044	0.89	1.12
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	0.104	2.10	2.64
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R4)

LEAD CODE:

- 1) Anode
- 2) No Connection
- 3) Cathode

R0 (2-March 2020)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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