

BZX84A2V4 THRU BZX84A47

**SURFACE MOUNT
SILICON ZENER DIODE
350mW, 2.4 THRU 47 VOLTS
1% TOLERANCE**

**SOT-23 CASE**www.centra-semi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BZX84A2V4 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		% / $^{\circ}\text{C}$	
BZX84A2V4	2.376	2.4	2.424	5.0	100	600	1.0	50	1.0	104	-0.06	*
BZX84A2V7	2.673	2.7	2.727	5.0	100	600	1.0	20	1.0	92	-0.06	*
BZX84A3V0	2.970	3.0	3.030	5.0	95	600	1.0	10	1.0	83	-0.06	*
BZX84A3V3	3.267	3.3	3.333	5.0	95	600	1.0	5.0	1.0	76	-0.06	*
BZX84A3V6	3.564	3.6	3.636	5.0	90	600	1.0	5.0	1.0	69	-0.06	*
BZX84A3V9	3.861	3.9	3.939	5.0	90	600	1.0	3.0	1.0	64	-0.06	*
BZX84A4V3	4.257	4.3	4.343	5.0	90	600	1.0	3.0	1.0	58	-0.05	*
BZX84A4V7	4.653	4.7	4.747	5.0	80	500	1.0	3.0	2.0	53	-0.03	Z1A
BZX84A5V1	5.049	5.1	5.151	5.0	60	480	1.0	2.0	2.0	49	0.02	*
BZX84A5V6	5.544	5.6	5.656	5.0	40	400	1.0	1.0	2.0	45	0.03	*
BZX84A6V2	6.138	6.2	6.262	5.0	10	150	1.0	3.0	4.0	40	0.04	*
BZX84A6V8	6.732	6.8	6.868	5.0	15	80	1.0	2.0	4.0	37	0.05	*
BZX84A7V5	7.425	7.5	7.575	5.0	15	80	1.0	1.0	5.0	33	0.05	*
BZX84A8V2	8.118	8.2	8.282	5.0	15	80	1.0	0.7	5.0	30	0.06	*
BZX84A9V1	9.009	9.1	9.191	5.0	15	100	1.0	0.5	6.0	27	0.06	*
BZX84A10	9.90	10	10.10	5.0	20	150	1.0	0.2	7.0	25	0.07	*
BZX84A11	10.89	11	11.11	5.0	20	150	1.0	0.1	8.0	23	0.07	*
BZX84A12	11.88	12	12.12	5.0	25	150	1.0	0.1	8.0	21	0.07	*
BZX84A13	12.87	13	13.13	5.0	30	170	1.0	0.1	8.0	19	0.08	*
BZX84A15	14.85	15	15.15	5.0	30	200	1.0	0.05	10.5	17	0.08	*

* Consult Factory

R0 (28-April 2011)

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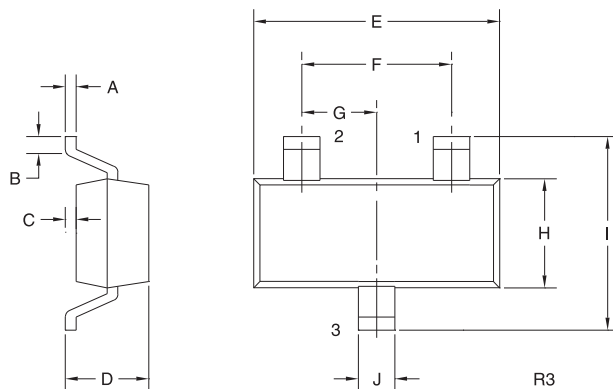


ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

Type	Zener Voltage V _Z @ I _{ZT}			Test Current 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		mA	Ω	Ω	mA	μA		V	
BZX84A16	15.84	16	16.16	5.0	40	200	1.0	0.05	11.2	16	0.08	*
BZX84A18	17.82	18	18.18	5.0	45	225	1.0	0.05	12.6	14	0.08	*
BZX84A20	19.80	20	20.20	5.0	55	225	1.0	0.05	14.0	12	0.08	*
BZX84A22	21.78	22	22.22	5.0	55	250	1.0	0.05	15.4	11	0.09	*
BZX84A24	23.76	24	24.24	5.0	70	250	1.0	0.05	16.8	10	0.09	*
BZX84A27	26.73	27	27.27	2.0	80	300	0.5	0.05	18.9	9	0.09	*
BZX84A30	29.70	30	30.30	2.0	80	300	0.5	0.05	21.0	8	0.09	*
BZX84A33	32.67	33	33.33	2.0	80	325	0.5	0.05	23.1	7	0.09	*
BZX84A36	35.64	36	36.36	2.0	90	350	0.5	0.05	25.2	6.9	0.09	*
BZX84A39	38.61	39	39.39	2.0	130	350	0.5	0.05	27.3	6.4	0.09	*
BZX84A43	42.57	43	43.43	2.0	150	375	0.5	0.05	30.1	5.8	0.10	*
BZX84A47	46.53	47	47.47	2.0	170	375	0.5	0.05	32.9	5.3	0.10	*

* Consult Factory

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

R0 (28-April 2011)