

BZX84C2V4-BZX84C51

225mW Zener Diode 2.4 to 51Volts

Features

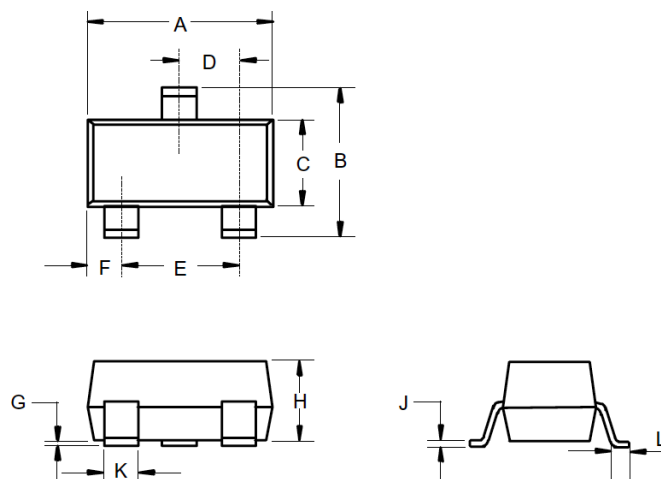
- 225 mW Rating on FR-4 or FR-5 Board
- Zener Breakdown Voltage Range 2.4 V to 75 V
- Package Designed for Optimal Automated Board Assembly
- Small Package Size for High Density Applications
- ESD Rating of

Applications

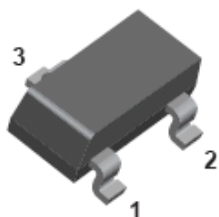
- Zener diode.
- Case : SOT-23

Packing & Order Information

3,000/Reel



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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	



RoHS
COMPLIANT

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATING (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Value	Unit
PD	Power Dissipation	On FR-5 Board (Note 1)@ Ta = 25 °C	225	mW
		Derated above 25 °C	1.8	mW/°C
RθJA	Thermal Resistance (Junction to Ambient)		556	°C/W

ABSOLUTE MAXIMUM RATING (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Value	Unit
PD	Power Dissipation	on Alumina Substrate, Note 2)@ Ta = 25 °C	300	mW
		Derated above 25 °C	2.4	mW/°C
RθJA	Thermal Resistance (Junction to Ambient)		417	°C/W
TJ=TSTG	Junction and storage temperature range		-65~+150	°C

BZX84C2V4-BZX84C51

225mW Zener Diode 2.4 to 51Volts

ELECTRICAL CHARACTERISTICS (Rating at 25°C ambient temperature unless otherwise specified)

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance		
		VZ@IZT			IZT	ZZT@IZT	ZZK@IZK	IZK
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA
BZX84C2V4	Z11	2.4	2.2	2.6	5	100	600	1.0
BZX84C2V7	Z12	2.7	2.5	2.9	5	100	600	1.0
BZX84C3V0	Z13	3.0	2.8	3.2	5	95	600	1.0
BZX84C3V3	Z14	3.3	3.1	3.5	5	95	600	1.0
BZX84C3V6	Z15	3.6	3.4	3.8	5	90	600	1.0
BZX84C3V9	Z16	3.9	3.7	4.1	5	90	600	1.0
BZX84C4V3	Z17	4.3	4.0	4.6	5	90	600	1.0
BZX84C4V7	Z1	4.7	4.4	5.0	5	80	500	1.0
BZX84C5V1	Z2	5.1	4.8	5.4	5	60	480	1.0
BZX84C5V6	Z3	5.6	5.2	6.0	5	40	400	1.0
BZX84C6V2	Z4	6.2	5.8	6.6	5	10	150	1.0
BZX84C6V8	Z5	6.8	6.4	7.2	5	15	80	1.0
BZX84C7V5	Z6	7.5	7.0	7.9	5	15	80	1.0
BZX84C8V2	Z7	8.2	7.7	8.7	5	15	80	1.0
BZX84C9V1	Z8	9.1	8.5	9.6	5	15	100	1.0
BZX84C10	Z9	10	9.4	10.6	5	20	150	1.0
BZX84C11	Y1	11	10.4	11.6	5	20	150	1.0
BZX84C12	Y2	12	11.4	12.7	5	20	150	1.0
BZX84C13	Y3	13	12.4	14.1	5	25	170	1.0
BZX84C15	Y4	15	13.8	15.6	5	30	200	1.0
BZX84C16	Y5	16	15.3	17.1	5	40	200	1.0
BZX84C18	Y6	18	16.8	19.1	5	45	225	1.0
BZX84C20	Y7	20	18	21.2	5	55	225	1.0
BZX84C22	Y8	22	20.8	23.3	5	55	250	1.0
BZX84C24	Y9	24	22.8	25.6	5	70	250	1.0
BZX84C27	Y10	27	25.1	28.9	5	80	300	1.0
BZX84C30	Y11	30	28.0	32.0	5	80	300	1.0
BZX84C33	Y12	33	31.0	35.0	5	80	325	1.0
BZX84C36	Y13	36	34.0	38.0	5	90	350	1.0
BZX84C39	Y14	39	37.0	41.0	5	130	350	1.0

BZX84C2V4-BZX84C51

225mW Zener Diode 2.4 to 51Volts

ELECTRICAL CHARACTERISTICS (Rating at 25°C ambient temperature unless otherwise specified)

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance		
		VZ@IZT			IZT	ZZT@IZT	ZZK@IZK	IZK
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA
BZX84C43	Y15	43	40.0	46.0	5	375	700	1.0
BZX84C47	Y16	47	44.0	50.0	5	375	750	1.0
BZX84C51	Y17	51	48.0	54.0	5	400	750	1.0

BZX84C2V4-BZX84C51

225mW Zener Diode 2.4 to 51Volts

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.