



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**BZX84C2V4
THRU
BZX84C51**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT ZENER DIODES

FEATURES

- * Voltage Range: 2.4V to 51V
- * Ideally Suited for Automated Assembly Process
- * 350mW Power Dissipation

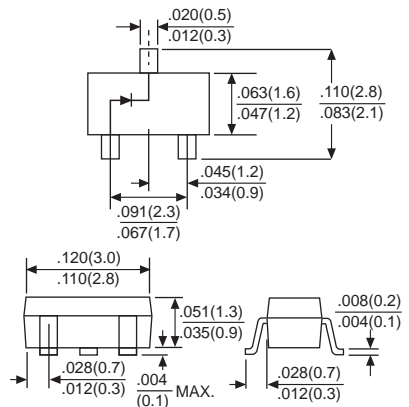
MECHANICAL DATA

- * Case: Molded plastic
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: See Diagram
- * Mounting position: Any
- * Weight: 0.008 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
 Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



SOT-23



Dimensions in inches and (millimeters)

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Maximum Power Dissipation @TA=25°C	Ptot	350	mW
Maximum Forward Voltage @IF=10mA	VF	0.9	Volts
Typical Thermal Resistance	RθJA	357	°C/W
Operating and Storage Temperature	TJ,Tstg	-55 to +150	°C

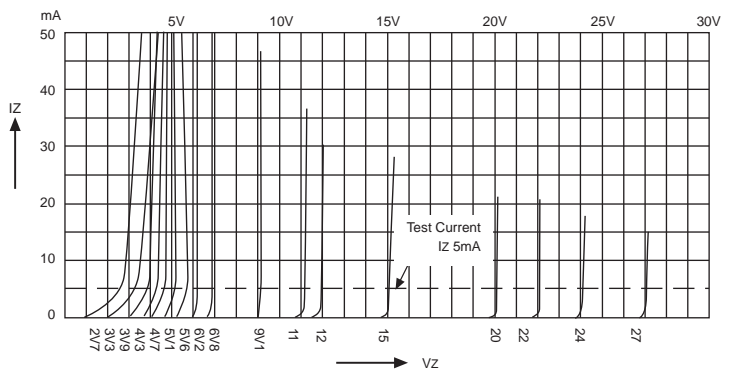
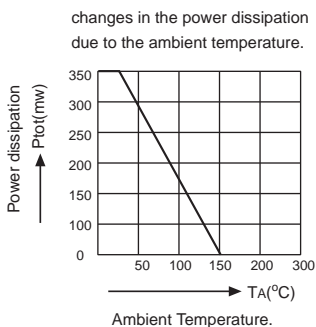
Note: Suffix 1."W" indicates "SOT-323" package. (e.g.: BZX84C2V41W,.....,BZX84C511W)
 2. Normal Tolerance ±5%

RATING AND CHARACTERISTIC CURVES (BZX84C SERIES)

TYPE	Nominal Zener Voltage $V_Z @ I_{ZT}$		Zener Test Current I_{ZT}	Maximum Zener Impedance			Maximum Reverse Leakage Current	
	Min	Max		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$	
				Ohms	Ohms		μA	Volts
BZX84C2V4	2.2	2.6	5	100	600	1	50	1
BZX84C2V7	2.5	2.9	5	100	600	1	20	1
BZX84C3V0	2.5	3.2	5	95	600	1	10	1
BZX84C3V3	3.1	3.5	5	95	600	1	5	1
BZX84C3V6	3.4	3.8	5	90	600	1	5	1
BZX84C3V9	3.7	4.1	5	90	600	1	3	1
BZX84C4V3	4.0	4.6	5	90	600	1	3	1
BZX84C4V7	4.4	5.0	5	80	500	1	3	2
BZX84C5V1	4.8	5.4	5	60	480	1	2	2
BZX84C5V6	5.2	6.0	5	40	400	1	1	2
BZX84C6V2	5.8	6.6	5	10	150	1	3	4
BZX84C6V8	6.4	7.2	5	15	80	1	2	4
BZX84C7V5	7.0	7.9	5	15	80	1	1	5
BZX84C8V2	7.7	8.7	5	15	80	1	0.7	5
BZX84C9V1	8.5	9.6	5	15	100	1	0.5	6
BZX84C10	9.4	10.6	5	20	150	1	0.2	7
BZX84C11	10.4	11.6	5	20	150	1	0.1	8
BZX84C12	11.4	12.7	5	25	150	1	0.1	8
BZX84C13	12.4	14.1	5	30	170	1	0.1	8
BZX84C15	13.8	15.6	5	30	200	1	0.1	10.5
BZX84C16	15.3	17.1	5	40	200	1	0.1	11.2
BZX84C18	16.8	19.1	5	45	225	1	0.1	12.6
BZX84C20	18.8	21.2	5	55	225	1	0.1	14.0
BZX84C22	20.8	23.3	5	55	250	1	0.1	15.4
BZX84C24	22.8	25.6	5	70	250	1	0.1	16.8
BZX84C27	25.1	28.9	2	80	300	0.5	0.1	18.9
BZX84C30	28.0	32.0	2	80	300	0.5	0.1	21.0
BZX84C33	31.0	35.0	2	80	325	0.5	0.1	23.1
BZX84C36	34.0	38.0	2	90	350	0.5	0.1	25.2
BZX84C39	37.0	41.0	2	130	350	0.5	0.1	27.3
BZX84C43	40.0	46.0	2	150	375	0.5	0.1	30.1
BZX84C47	44.0	50.0	2	170	375	0.5	0.1	32.9
BZX84C51	48.0	54.0	2	180	400	0.5	0.1	35.7

NOTE: Standard Zener Voltage Tolerance $\pm 5\%$

Breakdown characteristics BZX84-SERIES



Disclaimer

Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold *DC COMPONENTS* harmless against all damages.

DC COMPONENTS disclaims any and all liability arising out of the application or use of any product, including consequential or incidental damages. Statement regarding the suitability of products for certain types of applications are based on *DC COMPONENTS*'s knowledge of typical requirements that are often placed on *DC COMPONENTS* 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.

DC COMPONENTS reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein, and disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify *DC COMPONENTS*'s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Unless otherwise in writing, *DC COMPONENTS* products are intended for use as general electronic components in standard applications (eg: Consumer electronic, Computer equipment, Office equipment, etc.), and not recommended for use in a high specific application where a failure or malfunction of the device could result in human injury or death (eg: Aerospace equipment, Submarine cables, Combustion equipment, Safety devices, Life support systems, etc.)

Customers using or selling *DC COMPONENTS* products not expressly indicated for use in such applications do so at their own risk. If customer intended to use *DC COMPONENTS* standard quality grade devices for applications not envisioned by *DC COMPONENTS*, please contact our sales representatives in advance.



DC COMPONENTS CO., LTD.