



*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

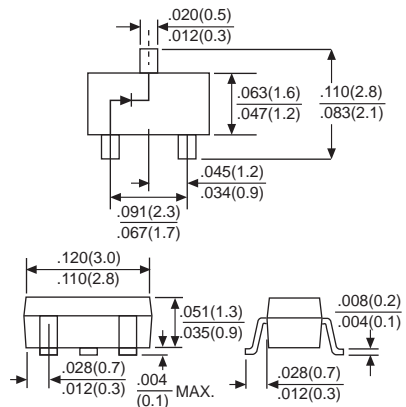
**MECHANICAL DATA**

- \* 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	ReJA	357	°C/W
Operating and Storage Temperature	TJ,Tstg	-55 to +150	°C

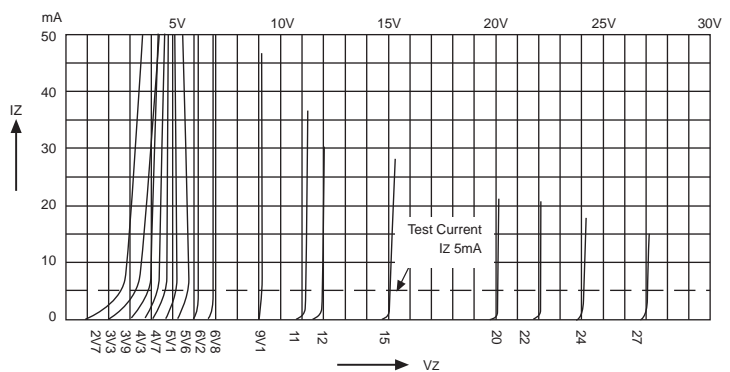
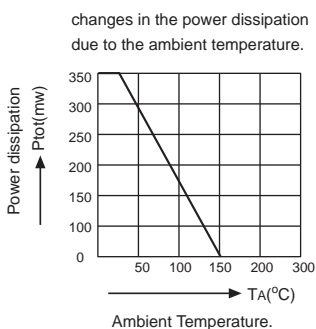
Note: Suffix 1."W" indicates "SOT-323" package. (e.g.: BZX84C2V41W,.....,BZX84C511W)  
 2. Normal Tolerance ±5%

# 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	
				$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	
	Min	Max		mA	Ohms	Ohms	mA	$\mu A$
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



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