

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

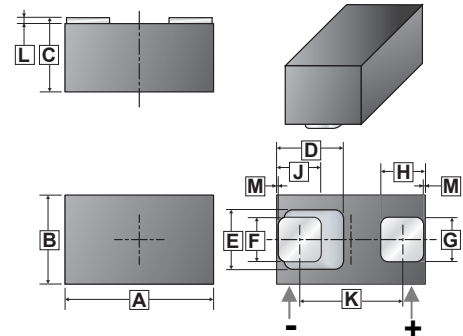
## FEATURES

- Ultra-Small Leadless Surface Mount Package
- Ideally Suited for Automated Assembly Processes

## PACKAGING INFORMATION

Package	MPQ	Leader Size
WBFBP-02C	10K	7 inch

## WBFBP-02C



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	0.275	0.325
B	0.550	0.650	H	0.275	0.325
C	0.450	0.550	J	0.275	0.325
D	0.450 REF.		K	0.675	0.725
E	0.400 REF.		L	0.010	0.070
F	0.275	0.325	M	0.010 REF.	

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage <sup>1</sup> @I <sub>F</sub> =10mA	V <sub>F</sub>	0.9	V
Power Dissipation	P <sub>D</sub>	100	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	1250	°C / W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65~150	°C

Note:

1. Short duration pulse test used to minimize self-heating effect.

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

Type Number	MARKING	Zener Voltage Range <sup>1</sup>				Maximum Zener Impedance <sup>2</sup>			Maximum Reverse Leakage Current <sup>1</sup>		TEMPERATURE COEFFICIENT OF ZENER VOLTAGE		Test Current
		V <sub>Z</sub> @ I <sub>ZT</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZX</sub> @ I <sub>ZX</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>	@I <sub>ZTC</sub> = 5mA mV/°C		
		Min(V)	Nom(V)	Max(V)	mA	Ω		mA	μA	V	Min.	Max.	mA
DW52C2V4	WX	2.2	2.4	2.6	5	100	600	1	50	1	-3.5	0	5
DW52C2V7	W1	2.5	2.7	2.9	5	100	600	1	20	1	-3.5	0	5
DW52C3V0	W2	2.8	3	3.2	5	95	600	1	10	1	-3.5	0	5
DW52C3V3	W3	3.1	3.3	3.5	5	95	600	1	5	1	-3.5	0	5
DW52C3V6	W4	3.4	3.6	3.8	5	90	600	1	5	1	-3.5	0	5
DW52C3V9	W5	3.7	3.9	4.1	5	90	600	1	3	1	-3.5	0	5
DW52C4V3	W6	4	4.3	4.6	5	90	600	1	3	1	-3.5	0	5
DW52C4V7	W7	4.4	4.7	5	5	80	500	1	3	2	-3.5	0.2	5
DW52C5V1	9Y	4.8	5.1	5.4	5	60	480	1	2	2	-2.7	1.2	5
DW52C5V6	9A	5.2	5.6	6	5	40	400	1	1	2	-2	2.5	5
DW52C6V2	9B	5.8	6.2	6.6	5	10	150	1	3	4	0.4	3.7	5
DW52C6V8	9C	6.4	6.8	7.2	5	15	80	1	2	4	1.2	4.5	5
DW52C7V5	9D	7	7.5	7.9	5	15	80	1	1	5	2.5	5.3	5
DW52C8V2	9E	7.7	8.2	8.7	5	15	80	1	0.7	5	3.2	6.2	5
DW52C9V1	9F	8.5	9.1	9.6	5	15	100	1	0.5	6	3.8	7	5
DW52C10V	9G	9.4	10	10.6	5	20	150	1	0.2	7	4.5	8	5
DW52C11V	9H	10.4	11	11.6	5	20	150	1	0.1	8	5.4	9	5
DW52C12V	9J	11.4	12	12.7	5	25	150	1	0.1	8	6	10	5
DW52C13V	9K	12.4	13	14.1	5	30	170	1	0.1	8	7	11	5
DW52C15V	9L	13.8	15	15.6	5	30	200	1	0.1	10.5	9.2	13	5
DW52C16V	9M	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14	5
DW52C18V	9N	16.8	18	19.1	5	45	225	1	0.1	12.6	12.4	16	5
DW52C20V	9P	18.8	20	21.2	5	55	225	1	0.1	14	14.4	18	5
DW52C22V	9R	20.8	22	23.3	5	55	250	1	0.1	15.4	16.4	20	5
DW52C24V	9S	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22	5
DW52C36V	9W	34	36	38	2	90	350	0.5	0.1	25.2	36.5	45.5	5
DW52C39V	9X	37	39	41	2	130	350	0.5	0.1	27.3	36.8	49.8	5

Notes:

- Short duration pulse test used to minimize self-heating effect.
- $f = 1\text{MHz}$

## CHARACTERISTIC CURVES

