

## BZQ5221B SERIES

### SURFACE MOUNT ZENER DIODES

**VOLTAGE** 2.4 to 75 Volts

**POWER** 500 mWatts

**QUADRO-MELF**

Unit : inch(mm)

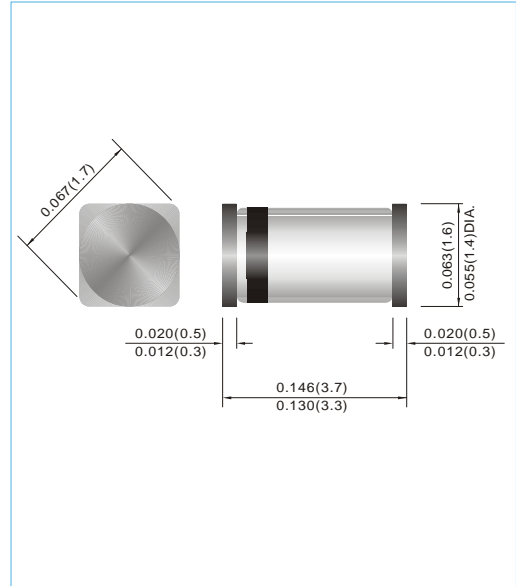
#### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2002/95/EC directives

#### MECHANICAL DATA

- Case: Molded Glass QUADRO-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.03 grams
- Mounting Position: Any
- Packing information

T/R - 2.5K per 7" plastic Reel



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P <sub>TOT</sub>	500	mW
Junction Temperature	T <sub>J</sub>	175	°C
Storage Temperature Range	T <sub>s</sub>	-65 to +175	°C

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	--	--	0.3	°C/mW
Forward Voltage at I <sub>F</sub> = 200mA	V <sub>F</sub>	--	--	1.1	V

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	uA	V
BZQ5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1
BZQ5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1
BZQ5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1
BZQ5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1
BZQ5225B	3	2.85	3.15	29	20	1600	0.25	50	1
BZQ5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1
BZQ5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1
BZQ5228B	3.9	3.71	4.1	23	20	1900	0.25	10	1
BZQ5229B	4.3	4.09	4.52	22	20	2000	0.25	5	1
BZQ5230B	4.7	4.47	4.94	19	20	1900	0.25	5	2
BZQ5231B	5.1	4.85	5.36	17	20	1600	0.25	5	2
BZQ5232B	5.6	5.32	5.88	11	20	1600	0.25	5	3
BZQ5233B	6	5.7	6.3	7	20	1600	0.25	5	3.5
BZQ5234B	6.2	5.89	6.51	7	20	1000	0.25	5	4
BZQ5235B	6.8	6.46	7.14	5	20	750	0.25	3	5
BZQ5236B	7.5	7.13	7.88	6	20	500	0.25	3	6
BZQ5237B	8.2	7.79	8.61	8	20	500	0.25	3	6.5
BZQ5238B	8.7	8.27	9.14	8	20	600	0.25	3	6.5
BZQ5239B	9.1	8.65	9.56	10	20	600	0.25	3	7
BZQ5240B	10	9.5	10.5	17	20	600	0.25	3	8
BZQ5241B	11	10.45	11.55	22	20	600	0.25	2	8.4
BZQ5242B	12	11.4	12.6	30	20	600	0.25	1	9.1
BZQ5243B	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9
BZQ5244B	14	13.3	14.7	15	9	600	0.25	0.1	10
BZQ5245B	15	14.25	15.75	16	8.5	600	0.25	0.1	11
BZQ5246B	16	15.2	16.8	17	7.8	600	0.25	0.1	12
BZQ5247B	17	16.15	17.85	19	7.4	600	0.25	0.1	13
BZQ5248B	18	17.1	18.9	21	7	600	0.25	0.1	14
BZQ5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14
BZQ5250B	20	19	21	25	6.2	600	0.25	0.1	15
BZQ5251B	22	20.9	23.1	29	5.6	600	0.25	0.1	17
BZQ5252B	24	22.8	25.2	33	5.2	600	0.25	0.1	18
BZQ5253B	25	23.75	26.25	35	5	600	0.25	0.1	19
BZQ5254B	27	25.65	28.35	41	4.6	600	0.25	0.1	21
BZQ5255B	28	26.6	29.4	44	4.5	600	0.25	0.1	21
BZQ5256B	30	28.5	31.5	49	4.2	600	0.25	0.1	23
BZQ5257B	33	31.35	34.65	58	3.8	700	0.25	0.1	25
BZQ5258B	36	34.2	37.8	70	3.4	700	0.25	0.1	27
BZQ5259B	39	37.05	40.95	80	3.2	800	0.25	0.1	30
BZQ5260B	43	40.85	45.15	93	3	900	0.25	0.1	33
BZQ5261B	47	44.65	49.35	105	2.7	1000	0.25	0.1	36
BZQ5262B	51	48.45	53.55	125	2.5	1100	0.25	0.1	39
BZQ5263B	56	53.2	58.8	150	2.2	1300	0.25	0.1	43
BZQ5264B	60	57	63	170	2.1	1400	0.25	0.1	46
BZQ5265B	62	58.9	65.1	185	2	1400	0.25	0.1	47
BZQ5266B	68	64.6	71.4	230	1.8	1600	0.25	0.1	52
BZQ5267B	75	71.25	78.75	270	1.7	1700	0.25	0.1	56

Notes.

STANDARD VOLTAGE TOLERANCE IS + 5% AND :

SUFFIX " A " FOR + 3%

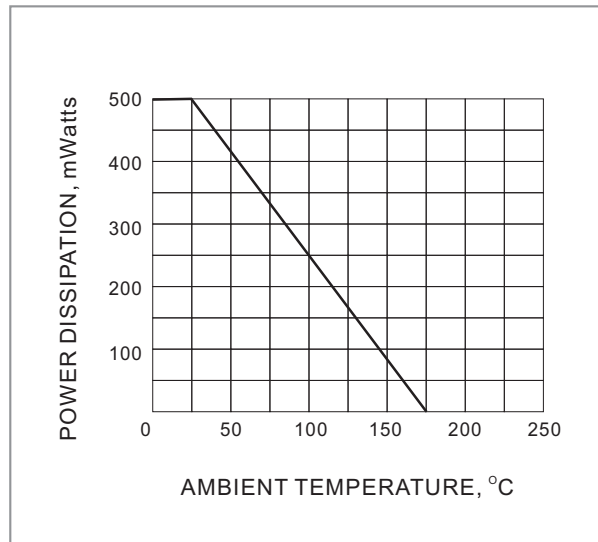
SUFFIX " B " FOR + 5%

SUFFIX " C " FOR + 10%

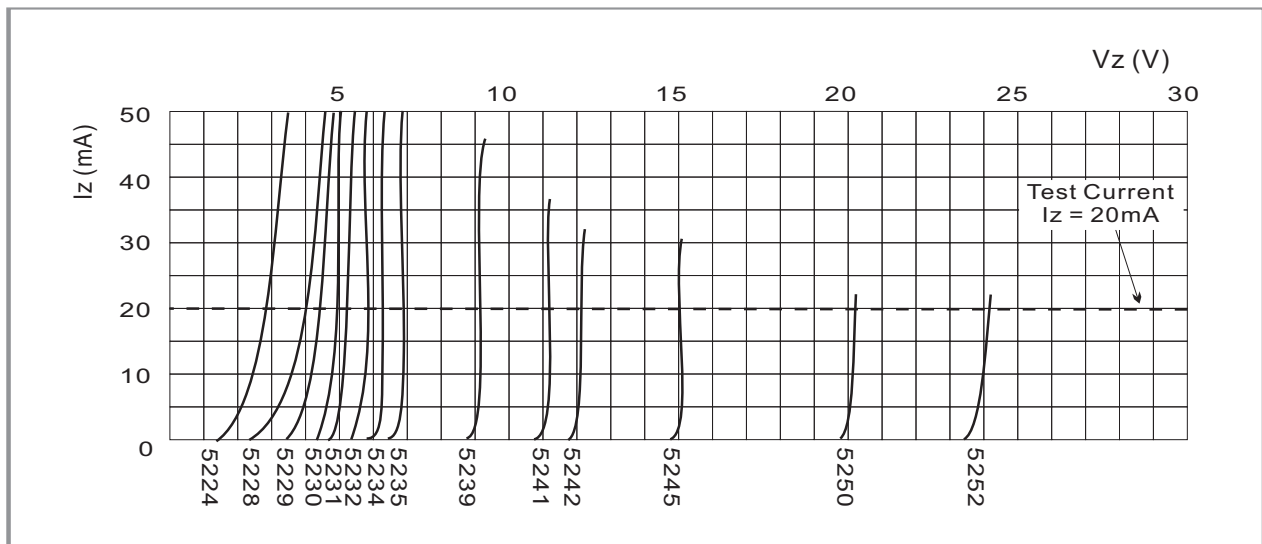
SUFFIX " D " FOR + 20%

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### RATING AND CHARACTERISTIC CURVES



**FIG. 1 POWER DERATING CURVE**



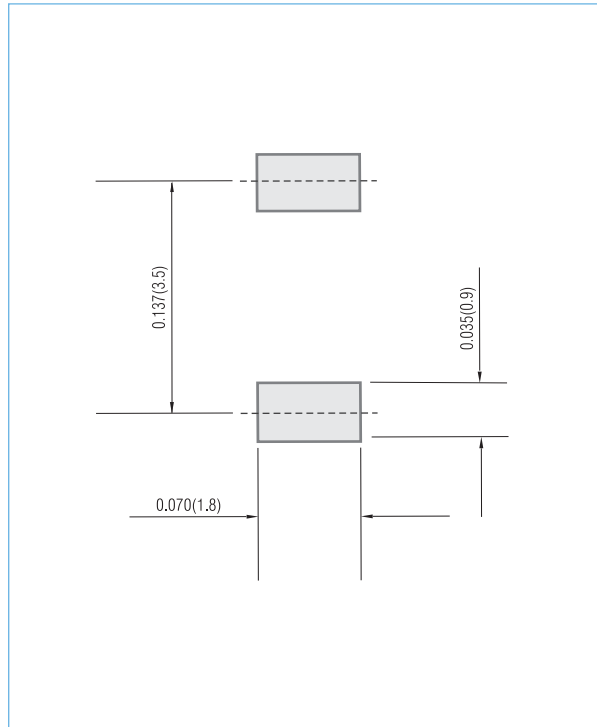
**Fig.2 BREAKDOWN CHARACTERISTICS**

## BZQ5221B SERIES

### MOUNTING PAD LAYOUT

QUADRO-MELF

Unit: inch ( mm )



### ORDER INFORMATION

- Packing information

T/R - 10K per 13" plastic Reel

T/R - 2.5K per 7" plastic Reel

## BZQ5221B SERIES

### Part No\_packing code\_Version

BZQ5221B\_R1\_10001

BZQ5221B\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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