

# BZM5221B SERIES

## SURFACE MOUNT ZENER DIODES

**VOLTAGE** 2.4 to 68 Volts    **POWER** 500 mWatts

**MICRO-MELF**    Unit : inch(mm)

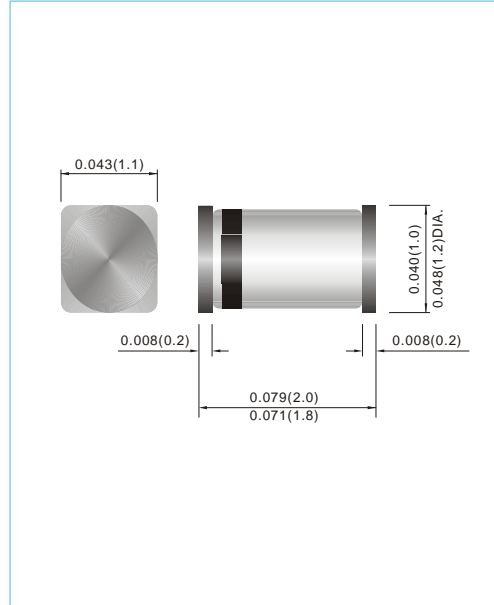
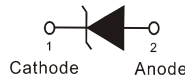
### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: Molded Glass MICRO-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.008 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 TA= 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 8mm 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	V

Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

## BZM5221B SERIES

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	μA	V
BZM5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1
BZM5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1
BZM5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1
BZM5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1
BZM5225B	3.0	2.85	3.15	29	20	1600	0.25	50	1
BZM5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1
BZM5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1
BZM5228B	3.9	3.71	4.1	23	20	1900	0.25	10	1
BZM5229B	4.3	4.09	4.52	22	20	2000	0.25	5	1
BZM5230B	4.7	4.47	4.94	19	20	1900	0.25	5	2
BZM5231B	5.1	4.85	5.36	17	20	1600	0.25	5	2
BZM5232B	5.6	5.32	5.88	11	20	1600	0.25	5	3
BZM5233B	6.0	5.7	6.3	7	20	1600	0.25	5	3.5
BZM5234B	6.2	5.89	6.51	7	20	1000	0.25	5	4
BZM5235B	6.8	6.46	7.14	5	20	750	0.25	3	5
BZM5236B	7.5	7.13	7.88	6	20	500	0.25	3	6
BZM5237B	8.2	7.79	8.61	8	20	500	0.25	3	6.5
BZM5238B	8.7	8.27	9.14	8	20	600	0.25	3	6.5
BZM5239B	9.1	8.65	9.56	10	20	600	0.25	3	7
BZM5240B	10	9.5	10.5	17	20	600	0.25	3	8

Notes.

STANDARD VOLTAGE TOLERANCE IS + 5% AND :

SUFFIX " A " FOR + 3%

SUFFIX " B " FOR + 5%

SUFFIX " C " FOR + 10%

SUFFIX " D " FOR + 20%

## BZM5221B SERIES

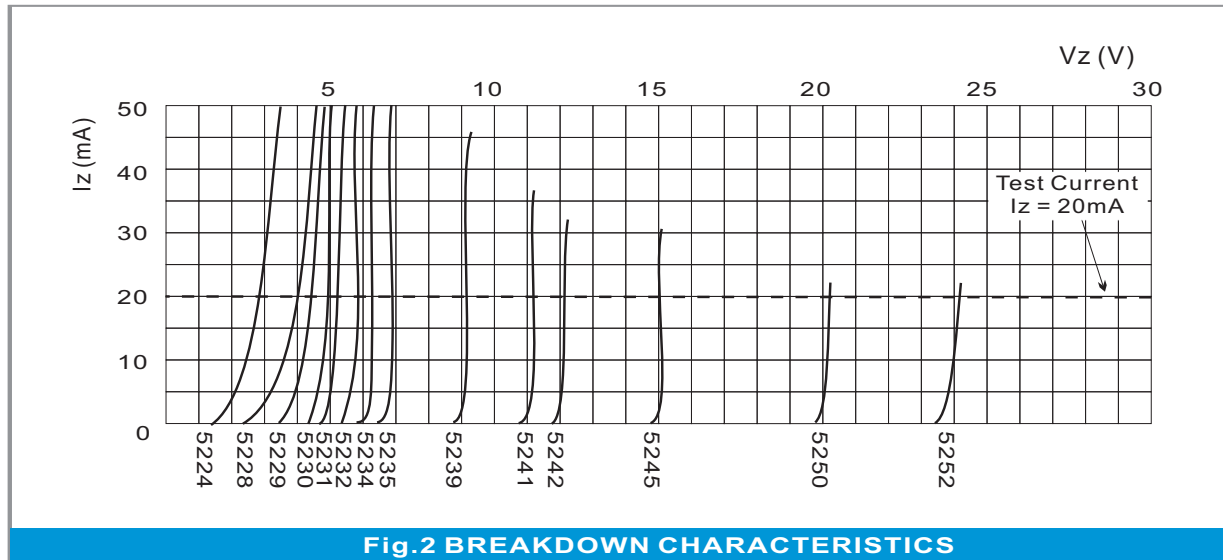
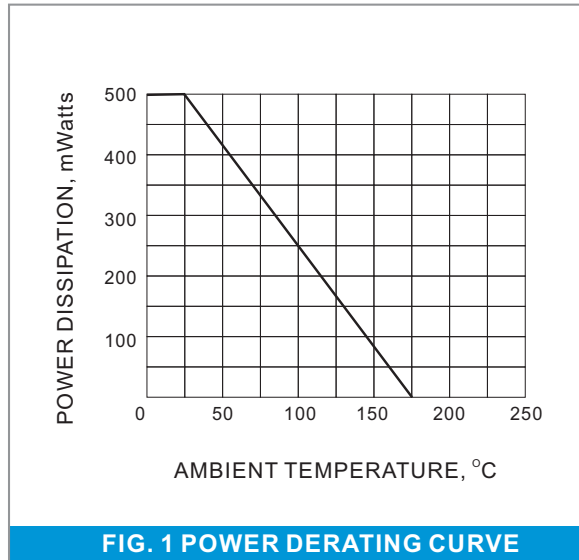
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	Vz @ IzT			ZzT @ IzT		Zzk @ Izk		Ir @ VR	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
BZM5241B	11	10.45	11.55	22	20	600	0.25	2	8.4
BZM5242B	12	11.4	12.6	30	20	600	0.25	1	9.1
BZM5243B	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9
BZM5244B	14	13.3	14.7	15	9	600	0.25	0.1	10
BZM5245B	15	14.25	15.75	16	8.5	600	0.25	0.1	11
BZM5246B	16	15.2	16.8	17	7.8	600	0.25	0.1	12
BZM5247B	17	16.15	17.85	19	7.4	600	0.25	0.1	13
BZM5248B	18	17.1	18.9	21	7	600	0.25	0.1	14
BZM5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14
BZM5250B	20	19	21	25	6.2	600	0.25	0.1	15
BZM5251B	22	20.9	23.1	29	5.6	600	0.25	0.1	17
BZM5252B	24	22.8	25.2	33	5.2	600	0.25	0.1	18
BZM5253B	25	23.75	26.25	35	5	600	0.25	0.1	19
BZM5254B	27	25.65	28.35	41	4.6	600	0.25	0.1	21
BZM5255B	28	26.6	29.4	44	4.5	600	0.25	0.1	21
BZM5256B	30	28.5	31.5	49	4.2	600	0.25	0.1	23
BZM5257B	33	31.35	34.65	58	3.8	700	0.25	0.1	25
BZM5258B	36	34.2	37.8	70	3.4	700	0.25	0.1	27
BZM5259B	39	37.05	40.95	80	3.2	800	0.25	0.1	30
BZM5260B	43	40.85	45.15	93	3	900	0.25	0.1	33
BZM5261B	47	44.65	49.35	150	2.7	1000	0.25	0.1	36
BZM5262B	51	48.45	53.55	125	2.5	1100	0.25	0.1	39
BZM5263B	56	53.2	58.8	150	2.2	1300	0.25	0.1	43
BZM5264B	60	57	63	170	2.1	1400	0.25	0.1	46
BZM5265B	62	58.9	65.1	185	2	1400	0.25	0.1	47
BZM5266B	68	64.6	71.4	230	1.8	1600	0.25	0.1	52

Notes.

- STANDARD VOLTAGE TOLERANCE IS + 5% AND :
- SUFFIX " A " FOR + 3%
- SUFFIX " B " FOR + 5%
- SUFFIX " C " FOR + 10%
- SUFFIX " D " FOR + 20%

## BZM5221B SERIES

### RATING AND CHARACTERISTIC CURVES

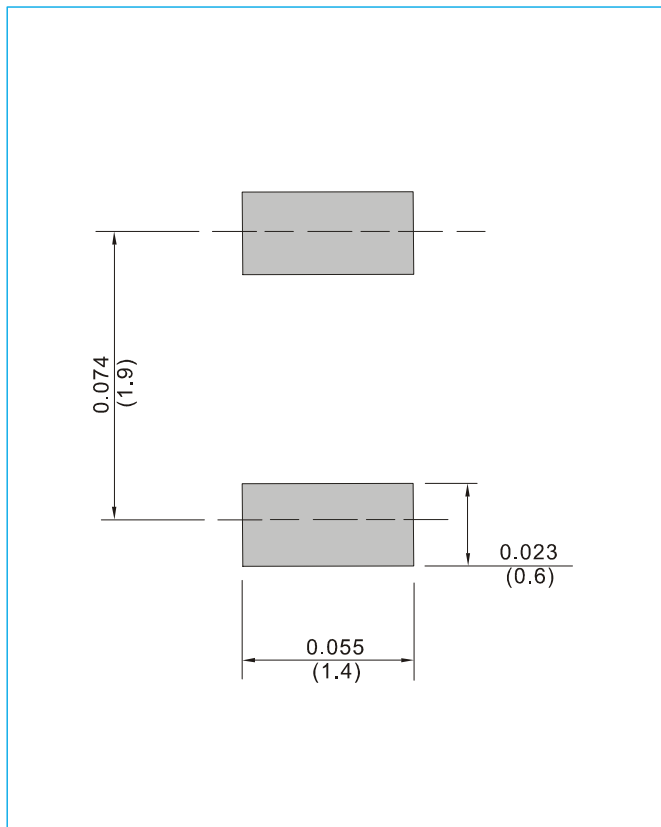


## BZM5221B SERIES

### MOUNTING PAD LAYOUT

#### MICRO-MELF

Unit : inch(mm)



### ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 2.5K per 7" plastic Reel

## BZM5221B SERIES

### Part No\_packing code\_Version

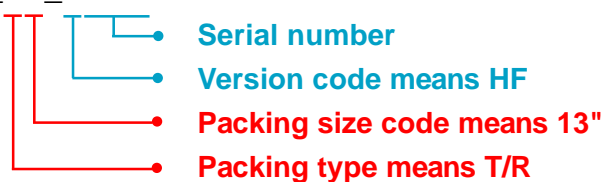
BZM5221B\_R1\_10001

BZM5221B\_R2\_10001

For example :

**RB500V-40\_R2\_00001**

Part No.



Packing Code XX				Version Code XXXXX		
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			

## BZM5221B SERIES

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.