

MMBZ5221B~MMBZ5262B

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 51 Volt **POWER** 410 mWatt

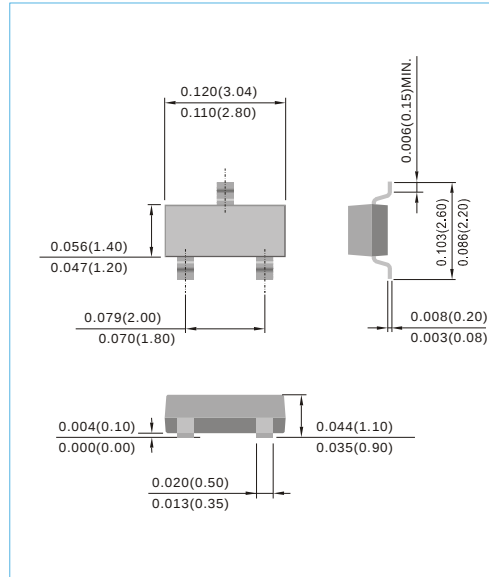
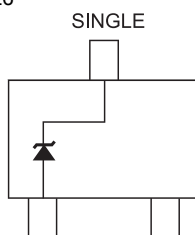
SOT-23 Unit : inch(mm)

FEATURES

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4V~51V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apprx. Weight: 0.0003 ounce, 0.0084 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation (Notes A) at 25°C	P _D	410	mW
Operating Junction and Storage Temperature Range	T _J	-55 to +150	°C

NOTES:

A. Mounted on 100mm²(1mm thick) copper areas.



MMBZ5221B~MMBZ5262B

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
410 mWatts Zener Diodes										
MMBZ5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1.0	C1
MMBZ5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1.0	C2
MMBZ5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1.0	C3
MMBZ5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1.0	C4
MMBZ5225B	3.0	2.85	3.15	30	20	1600	0.25	50	1.0	C5
MMBZ5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1.0	D1
MMBZ5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1.0	D2
MMBZ5228B	3.9	3.71	4.10	23	20	1900	0.25	10	1.0	D3
MMBZ5229B	4.3	4.09	4.52	22	20	2000	0.25	5.0	1.0	D4
MMBZ5230B	4.7	4.47	4.94	19	20	1900	0.25	5.0	2.0	D5
MMBZ5231B	5.1	4.85	5.36	17	20	1600	0.25	5.0	2.0	E1
MMBZ5232B	5.6	5.32	5.88	11	20	1600	0.25	5.0	3.0	E2
MMBZ5233B	6.0	5.70	6.30	7.0	20	1600	0.25	5.0	3.5	E3
MMBZ5234B	6.2	5.89	6.51	7	20	1000	0.25	5.0	4.0	E4
MMBZ5235B	6.8	6.46	7.14	5	20	750	0.25	3.0	5.0	E5
MMBZ5236B	7.5	7.13	7.88	6	20	500	0.25	3.0	6.0	F1
MMBZ5237B	8.2	7.79	8.61	8	20	500	0.25	3.0	6.0	F2
MMBZ5238B	8.7	8.27	9.14	8	20	600	0.25	3.0	6.5	F3
MMBZ5239B	9.1	8.65	9.56	10	20	600	0.25	3.0	6.5	F4
MMBZ5240B	10	9.50	10.50	17	20	600	0.25	3.0	8.0	F5
MMBZ5241B	11	10.45	11.55	22	20	600	0.25	3.0	8.4	H1
MMBZ5242B	12	11.40	12.60	30	20	600	0.25	2.0	9.1	H2
MMBZ5243B	13	12.35	13.65	13	9.5	600	0.25	1.0	9.9	H3
MMBZ5244B	14	13.30	14.70	15	9.0	600	0.25	0.1	10.5	H4
MMBZ5245B	15	14.25	15.75	16	8.5	600	0.25	0.5	11	H5
MMBZ5246B	16	15.20	16.80	17	7.8	600	0.25	0.1	12	J1
MMBZ5247B	17	16.15	17.85	19	7.5	600	0.25	0.1	13	J2
MMBZ5248B	18	17.10	18.90	21	7.0	600	0.25	0.1	14	J3
MMBZ5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14	J4
MMBZ5250B	20	19.00	21.00	25	6.2	600	0.25	0.1	15	J5
MMBZ5251B	22	20.90	23.10	29	5.6	600	0.25	0.1	17	K1
MMBZ5252B	24	22.80	25.20	33	5.2	600	0.25	0.1	18	K2
MMBZ5253B	25	23.75	26.25	35	5.0	600	0.25	0.1	19	K3
MMBZ5254B	27	25.65	28.35	41	5.0	600	0.25	0.1	21	K4
MMBZ5255B	28	26.60	29.40	44	4.5	600	0.25	0.1	21	K5
MMBZ5256B	30	28.50	31.50	49	4.2	600	0.25	0.1	23	M1
MMBZ5257B	33	31.35	34.65	58	3.8	700	0.25	0.1	25	M2
MMBZ5258B	36	34.20	37.80	70	3.4	700	0.25	0.1	27	M3
MMBZ5259B	39	37.05	40.95	80	3.2	800	0.25	0.1	30	M4
MMBZ5260B	43	40.85	45.15	93	3.0	900	0.25	0.1	33	M5
MMBZ5261B	47	44.65	49.35	105	2.7	1000	0.25	0.1	36	N1
MMBZ5262B	51	48.45	53.55	125	2.5	1100	0.25	0.1	39	N2

MMBZ5221B~MMBZ5262B

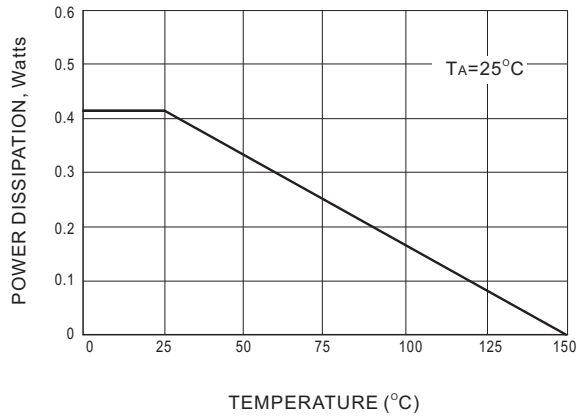


Fig.1 STEADY STATE POWER DERATING

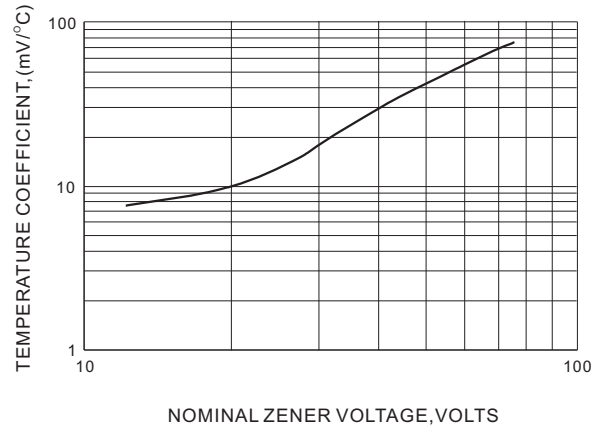


Fig.2 TEMPERATURE COEFFICIENTS

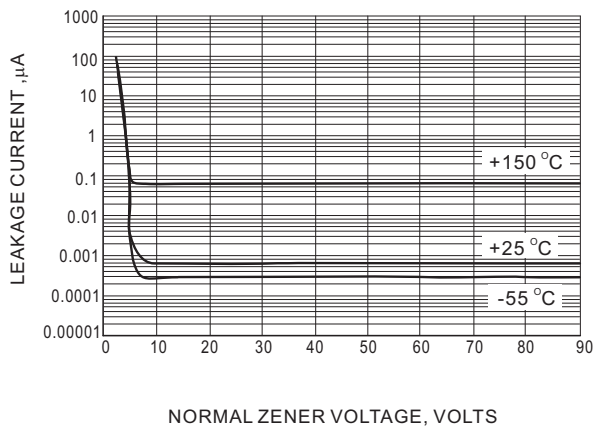


Fig.3 TYPICAL LEAKAGE CURRENT

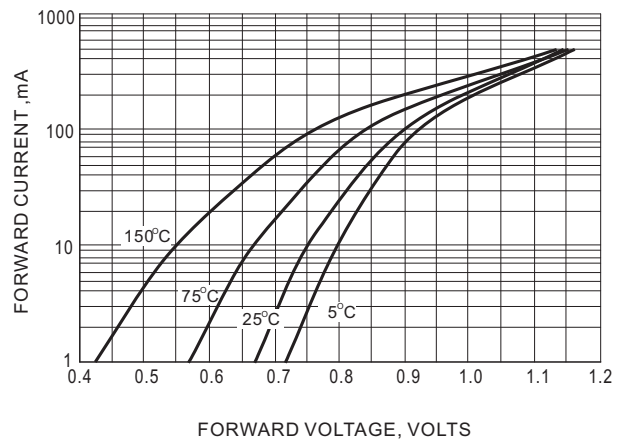


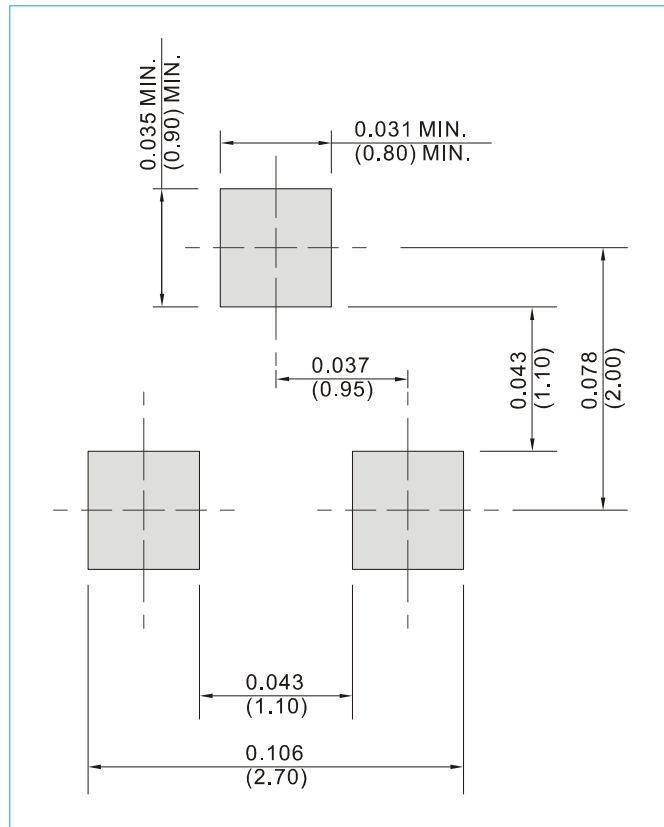
Fig.4 TYPICAL FORWARD VOLTAGE

MMBZ5221B~MMBZ5262B

MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

MMBZ5221B~MMBZ5262B

Part No_packing code_Version

MMBZ5221B_R1_00001

MMBZ5221B_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



MMBZ5221B~MMBZ5262B

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[MMBZ5232B_R2_00001](#) [MMBZ5232B_R1_00001](#) [MMBZ5232B_R1_10001](#) [MMBZ5232B_R2_10001](#)