



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

MMBZ5221B  
THRU  
MMBZ5259B

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SILICON ZENER DIODES**

**FEATURES**

- \* Planar Die construction
- \* Zener Voltages from 2.4V - 39V
- \* 350mW Power Dissipation
- \* Ideally Suited for Automated Assembly Processes

**MECHANICAL DATA**

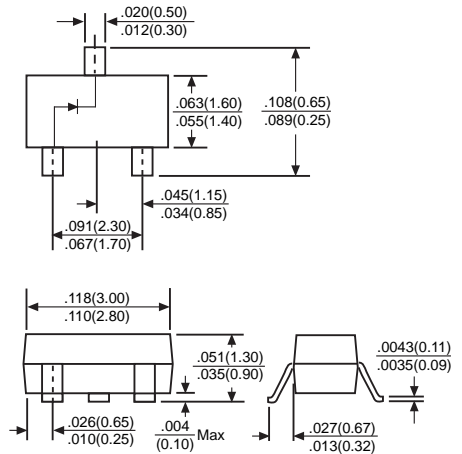
- \* Case: Molded Plastic
- \* Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- \* Polarity: See Diagram Below
- \* Mounting position: Any
- \* Weight: 0.008 gram Approx.

**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)

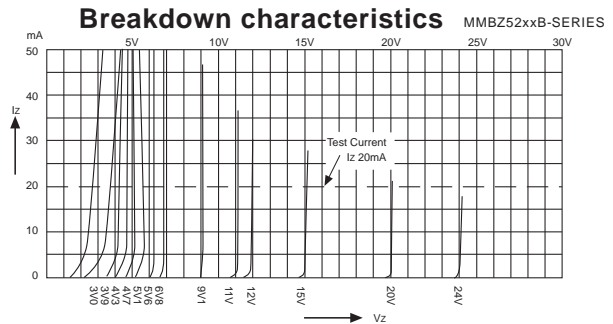
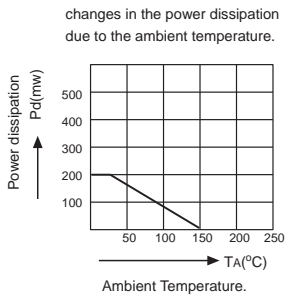
	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Maximum Power Dissipation @TA=25°C	Ptot	350	mW
Maximum Forward Voltage @IF=10mA	VF	0.9	Volts
Typical Thermal Resistance	RθJA	357	°C/W
Operating and Storage Temperature	TJ,Tstg	-55 to +150	°C

Note: Suffix "W" indicates "SOT-323" package. (e.g.: MMBZ5221BW,.....,MMBZ5259BW)

# RATING AND CHARACTERISTIC CURVES (MMBZ52xxB SERIES)

TYPE	Nominal Zener Voltage $V_Z @ I_{ZT}$	Zener Test Current $I_{ZT}$	Maximum Zener Impedance			Maximum Reverse Leakage Current	
			$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	
	Volts	mA	Ohms	Ohms	mA	$\mu A$	Volts
MMBZ5221B	2.4	20	30	1200	0.25	100	1.0
MMBZ5222B	2.5	20	30	1250	0.25	100	1.0
MMBZ5223B	2.7	20	30	1300	0.25	75	1.0
MMBZ5225B	3.0	20	30	1600	0.25	50	1.0
MMBZ5226B	3.3	20	28	1600	0.25	25	1.0
MMBZ5227B	3.6	20	24	1700	0.25	15	1.0
MMBZ5228B	3.9	20	23	1900	0.25	10	1.0
MMBZ5229B	4.3	20	22	2000	0.25	5	1.0
MMBZ5230B	4.7	20	19	1900	0.25	5	2.0
MMBZ5231B	5.1	20	17	1600	0.25	5	2.0
MMBZ5232B	5.6	20	11	1600	0.25	5	3.0
MMBZ5233B	6.0	20	7	1600	0.25	5	3.5
MMBZ5234B	6.2	20	7	1000	0.25	5	4.0
MMBZ5235B	6.8	20	5	750	0.25	3	5.0
MMBZ5236B	7.5	20	6	500	0.25	3	6.0
MMBZ5237B	8.2	20	8	500	0.25	3	6.0
MMBZ5238B	8.7	20	8	600	0.25	3	6.5
MMBZ5239B	9.1	20	10	600	0.25	3	6.5
MMBZ5240B	10	20	17	600	0.25	3	8.0
MMBZ5241B	11	20	22	600	0.25	3	8.4
MMBZ5242B	12	20	30	600	0.25	2	9.1
MMBZ5243B	13	9.5	13	600	0.25	1	9.9
MMBZ5245B	15	8.5	16	600	0.25	0.1	11
MMBZ5246B	16	7.8	17	600	0.25	0.1	12
MMBZ5248B	18	7.0	21	600	0.25	0.1	14
MMBZ5250B	20	6.2	25	600	0.25	0.1	15
MMBZ5251B	22	5.6	29	600	0.25	0.1	17
MMBZ5252B	24	5.2	33	600	0.25	0.1	18
MMBZ5254B	27	5.0	41	600	0.25	0.1	21
MMBZ5255B	28	4.5	44	600	0.25	0.1	21
MMBZ5256B	30	4.2	49	600	0.25	0.1	23
MMBZ5257B	33	3.8	58	700	0.25	0.1	25
MMBZ5258B	36	3.4	70	700	0.25	0.1	27
MMBZ5259B	39	3.2	80	800	0.25	0.1	30

NOTE: Standard Zener Voltage Tolerance  $\pm 5\%$



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