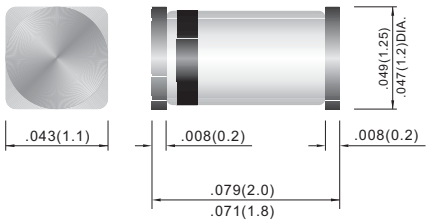
DATA SHEET

BZM5221B SERIES

SURFACE MOUNT ZENER DIODES

VOLTAGE 2.4 to 47 Volts **POWER** 500 mWatts

MICRO-MELF Unit : inch (mm)



FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

- Case: Molded Glass MICRO-MELF
- Terminals: Solderable per MIL-STD-202, Method 208
- 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 Tamb = 25 °C	P_{TOT}	500	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-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	RthA	--	--	0.3	K/mW
Forward Voltage at IF = 100mA	VF	--	--	1	V
Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.					

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	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	uA	V
BZM5221B	2.4	2.28	2.52	30	20	1200	0.25	100	1.0
BZM5222B	2.5	2.38	2.63	30	20	1250	0.25	100	1.0
BZM5223B	2.7	2.57	2.84	30	20	1300	0.25	75	1.0
BZM5224B	2.8	2.66	2.94	30	20	1400	0.25	75	1.0
BZM5225B	3.0	2.85	3.15	29	20	1600	0.25	50	1.0
BZM5226B	3.3	3.14	3.47	28	20	1600	0.25	25	1.0
BZM5227B	3.6	3.42	3.78	24	20	1700	0.25	15	1.0
BZM5228B	3.9	3.71	4.10	23	20	1900	0.25	10	1.0
BZM5229B	4.3	4.09	4.52	22	20	2000	0.25	5	1.0
BZM5230B	4.7	4.47	4.94	19	20	1900	0.25	5	2.0
BZM5231B	5.1	4.85	5.36	17	20	1600	0.25	5	2.0
BZM5232B	5.6	5.32	5.88	11	20	1600	0.25	5	3.0
BZM5233B	6.0	5.70	6.30	7	20	1600	0.25	5	3.5
BZM5234B	6.2	5.89	6.51	7	20	1000	0.25	5	4.0
BZM5235B	6.8	6.46	7.14	5	20	750	0.25	3	5.0
BZM5236B	7.5	7.13	7.88	6	20	500	0.25	3	6.0
BZM5237B	8.2	7.79	8.61	8	20	500	0.25	3	6.5
BZM5238B	8.7	8.26	9.13	8	20	600	0.25	3	6.5
BZM5239B	9.1	8.65	9.56	10	20	600	0.25	3	7.0
BZM5240B	10	9.50	10.50	17	20	600	0.25	3	8.0
BZM5241B	11	10.45	11.55	22	20	600	0.25	2	8.4
BZM5242B	12	11.40	12.60	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	13.30	14.70	15	9.0	600	0.25	0.1	10
BZM5245B	15	14.25	15.75	16	8.5	600	0.25	0.1	11
BZM5246B	16	15.20	16.80	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	17.10	18.90	21	7.0	600	0.25	0.1	14
BZM5249B	19	18.05	19.95	23	6.6	600	0.25	0.1	14
BZM5250B	20	19.00	21.00	25	6.2	600	0.25	0.1	15
BZM5251B	22	20.90	23.10	29	5.6	600	0.25	0.1	17
BZM5252B	24	22.80	25.20	33	5.2	600	0.25	0.1	18
BZM5253B	25	23.75	26.25	35	5.0	600	0.25	0.1	19
BZM5254B	27	25.65	28.35	41	4.6	600	0.25	0.1	21
BZM5255B	28	26.60	29.40	44	4.5	600	0.25	0.1	21
BZM5256B	30	28.50	31.50	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	34.20	37.80	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	3.0	900	0.25	0.1	33
BZM5261B	47	44.65	49.35	150	2.7	100	0.25	0.1	36

Notes.

STANDARD VOLTAGE TOLERANCE IS + 5% AND :

SUFFIX " A" FOR + 3%

SUFFIX " B" FOR + 5%

SUFFIX " C" FOR + 10%

SUFFIX " D" FOR + 20%

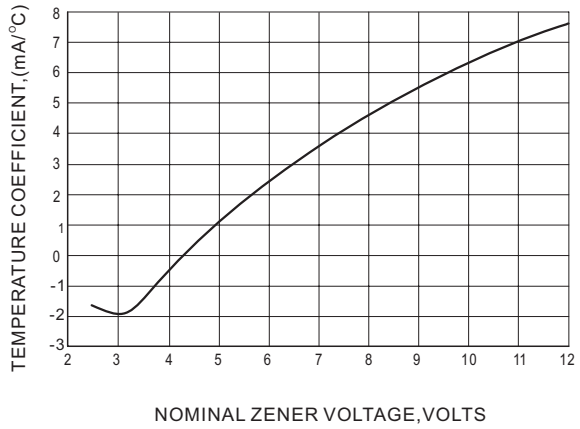


Fig.1 TEMPERATURE COEFFICENTS

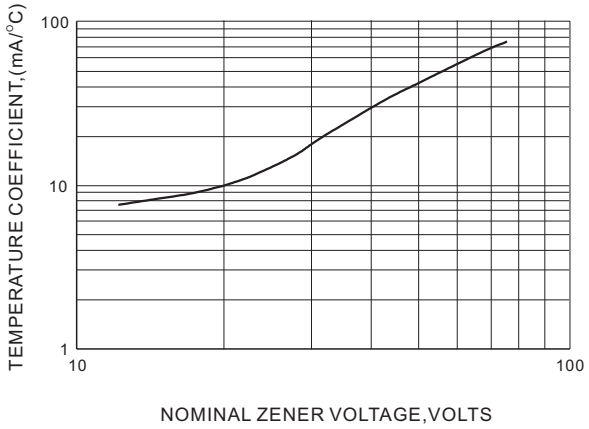


Fig.2 TEMPERATURE COEFFICENTS

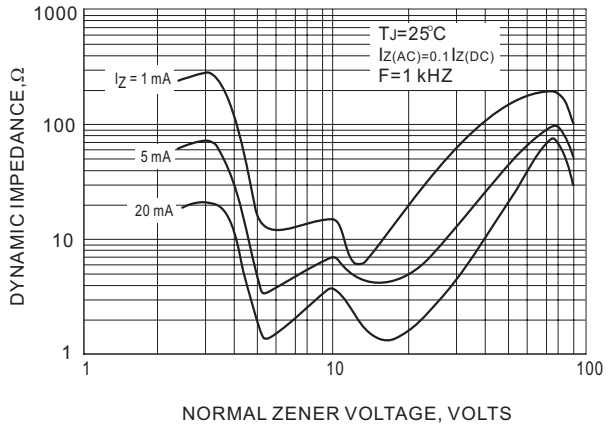


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

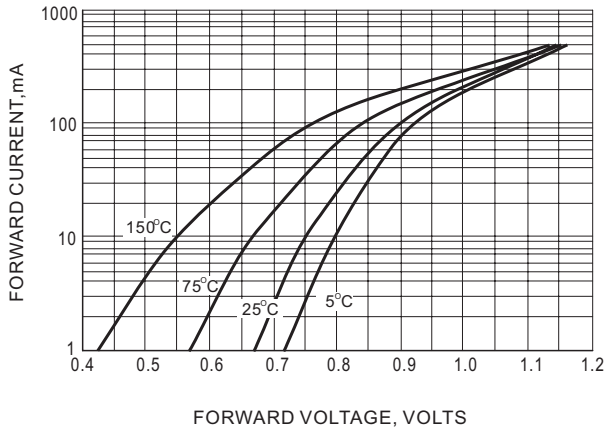


Fig.4 TYPICAL FORWARD VOLTAGE

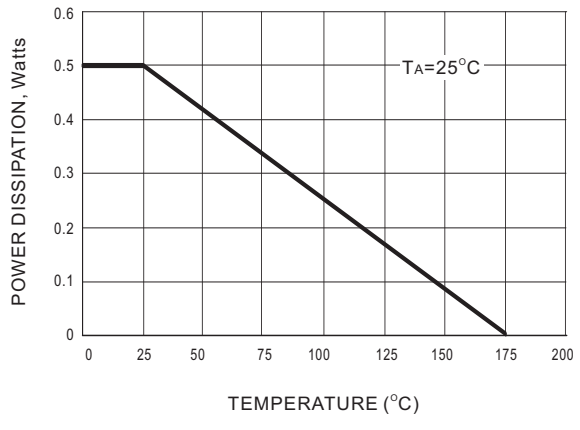


Fig.5 STEADY STATE POWER DERATING

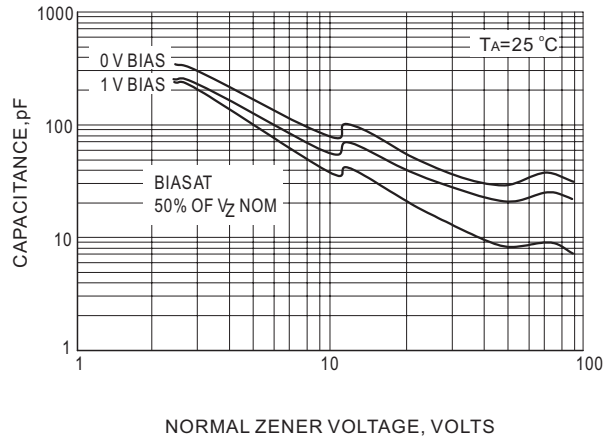


Fig.6 TYPICAL CAPACITANCE

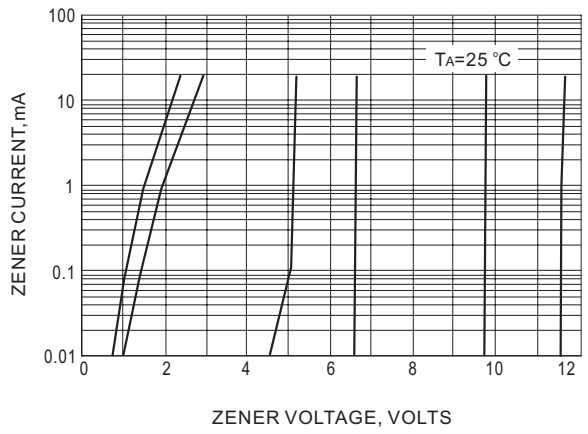


Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

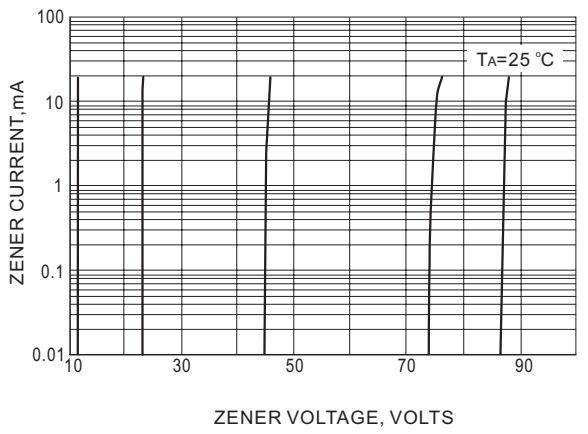


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

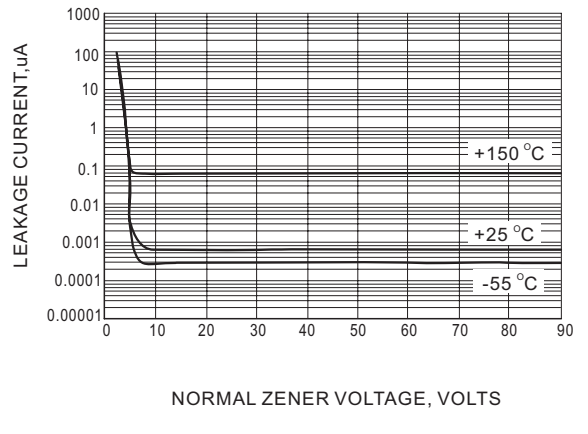


Fig.9 TYPICAL LEAKAGE CURRENT