



# BZM5221B- BZM5261B

## SURFACE MOUNT SILICON ZENER DIODES

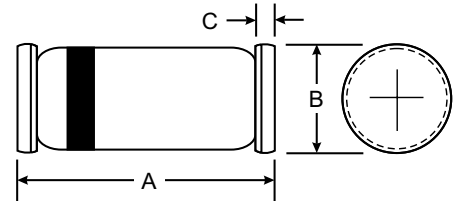
**VOLTAGE RANGE: 2.4 - 47V**  
**POWER: 0.5Watts**

### Features

- Planar Die Construction
- Sealed Glass Case
- Ideally Suited for Automated Insertion
- 2.4V - 47V Nominal Zener Voltages

### Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



LL34/ SOD-80		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

### Maximum Ratings T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 2)	P <sub>d</sub>	500	mW
Forward Voltage @ I <sub>F</sub> = 200mA	V <sub>F</sub>	1.5	V
Thermal Resistance, Junction to Ambient Air (Note 2)	R <sub>θJA</sub>	300	K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +175	°C

- Notes: 1. Tested with Pulses, t<sub>p</sub> = 20ms.  
 2. Valid provided that Electrodes are kept at Ambient Temperature.



Type	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	2.40	2.28	2.52	30	20.0	1200	0.25	100	1.0
BZM5222B	2.50	2.38	2.63	30	20.0	1250	0.25	100	1.0
BZM5223B	2.70	2.57	2.84	30	20.0	1300	0.25	75	1.0
BZM5224B	2.80	2.66	2.94	30	20.0	1400	0.25	75	1.0
BZM5225B	3.00	2.85	3.15	29	20.0	1600	0.25	50	1.0
BZM5226B	3.30	3.14	3.47	28	20.0	1600	0.25	25	1.0
BZM5227B	3.60	3.42	3.78	24	20.0	1700	0.25	15	1.0
BZM5228B	3.90	3.71	4.10	23	20.0	1900	0.25	10	1.0
BZM5229B	4.30	4.09	4.52	22	20.0	2000	0.25	5.0	1.0
BZM5230B	4.70	4.47	4.94	19	20.0	1900	0.25	5.0	2.0
BZM5231B	5.10	4.85	5.36	17	20.0	1600	0.25	5.0	2.0
BZM5232B	5.60	5.32	5.88	11	20.0	1600	0.25	5.0	3.0
BZM5233B	6.00	5.70	6.30	7	20.0	1600	0.25	5.0	3.5
BZM5234B	6.20	5.89	6.51	7	20.0	1000	0.25	5.0	4.0
BZM5235B	6.80	6.46	7.14	5	20.0	750	0.25	3.0	5.0
BZM5236B	7.50	7.13	7.88	6	20.0	500	0.25	3.0	6.0
BZM5237B	8.20	7.79	8.61	8	20.0	500	0.25	3.0	6.5
BZM5238B	8.70	8.27	9.14	8	20.0	600	0.25	3.0	6.5
BZM5239B	9.10	8.65	9.56	10	20.0	600	0.25	3.0	7.0
BZM5240B	10.00	9.50	10.50	17	20.0	600	0.25	3.0	8.0
BZM5241B	11.00	10.45	11.55	22	20.0	600	0.25	2.0	8.4
BZM5242B	12.00	11.40	12.60	30	20.0	600	0.25	1.0	9.1
BZM5243B	13.00	12.35	13.65	13	9.5	600	0.25	0.5	9.9
BZM5244B	14.00	13.30	14.70	15	9.5	600	0.25	0.1	10.0
BZM5245B	15.00	14.25	15.75	16	8.5	600	0.25	0.1	11.0
BZM5246B	16.00	15.20	16.80	17	7.8	600	0.25	0.1	12.0
BZM5247B	17.00	16.15	17.85	19	7.4	600	0.25	0.1	13.0
BZM5248B	18.00	17.10	18.90	21	7.0	600	0.25	0.1	14.0
BZM5249B	19.00	18.05	19.95	23	6.6	600	0.25	0.1	14.0
BZM5250B	20.00	19.00	21.00	25	6.2	600	0.25	0.1	15.0
BZM5251B	22.00	20.90	23.10	29	5.6	600	0.25	0.1	17.0
BZM5252B	24.00	22.80	25.20	33	5.2	600	0.25	0.1	18.0
BZM5253B	25.00	23.75	26.25	35	5.0	600	0.25	0.1	19.0
BZM5254B	27.00	25.65	28.35	41	4.6	600	0.25	0.1	21.0
BZM5255B	28.00	26.60	29.40	44	4.5	600	0.25	0.1	21.0
BZM5256B	30.00	28.50	31.50	49	4.2	600	0.25	0.1	23.0
BZM5257B	33.00	31.35	34.65	58	3.8	700	0.25	0.1	25.0
BZM5258B	36.00	34.20	37.80	70	3.4	700	0.25	0.1	27.0
BZM5259B	39.00	37.05	40.95	80	3.2	800	0.25	0.1	30.0
BZM5260B	43.00	40.85	45.15	93	3.0	900	0.25	0.1	33.0
BZM5261B	47.00	44.65	49.35	150	2.7	1000	0.25	0.1	36.0

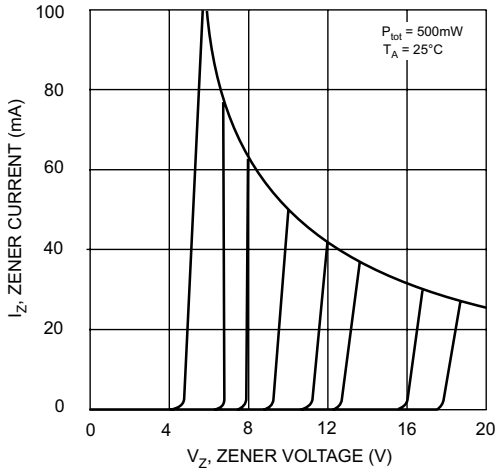


Fig. 1, Zener Current vs Zener Voltage

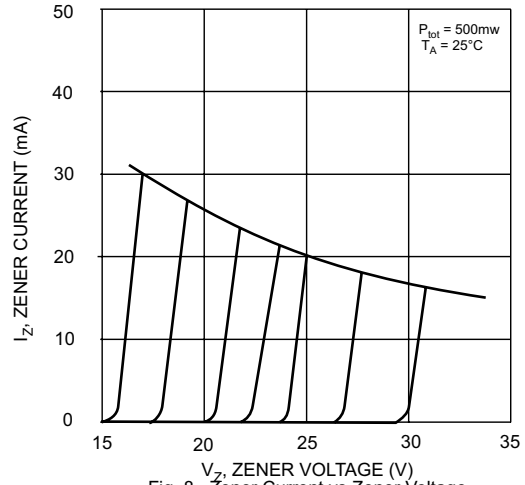


Fig. 8, Zener Current vs Zener Voltage

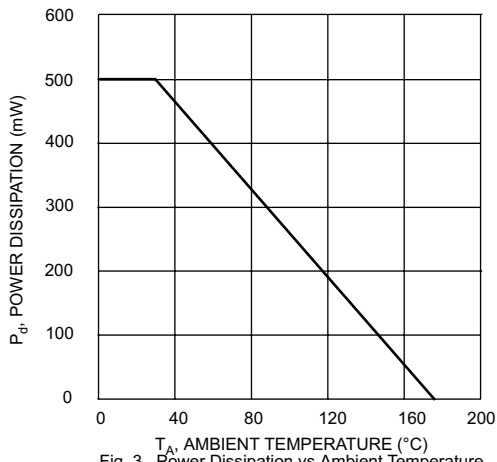


Fig. 3, Power Dissipation vs Ambient Temperature

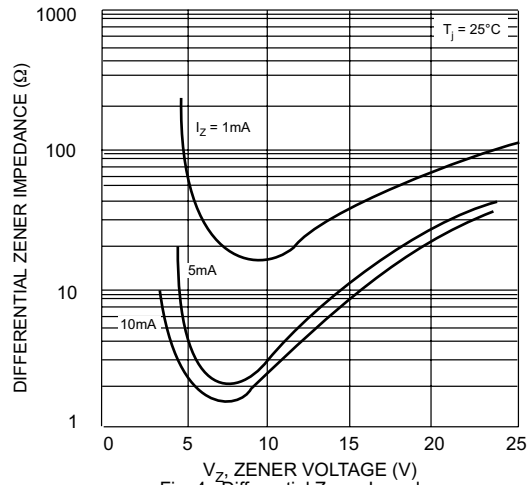


Fig. 4, Differential Zener Impedance

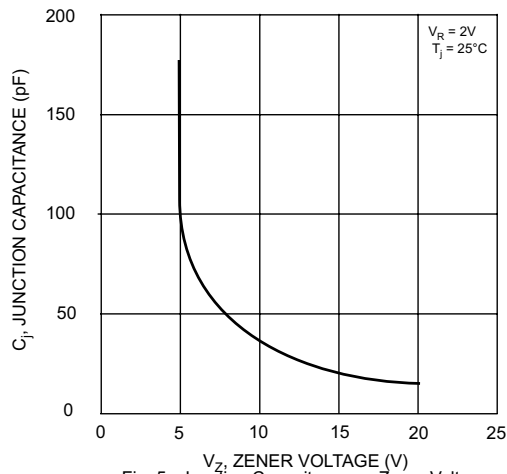


Fig. 5, Junction Capacitance vs Zener Voltage