

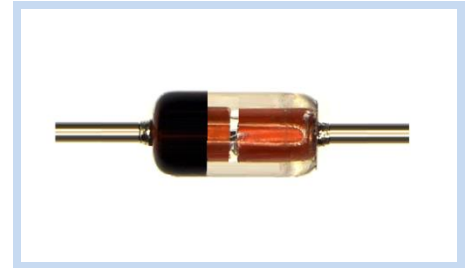
Zener Diodes DO-35G Axial Leaded

1N52-BG Series

MERITEK

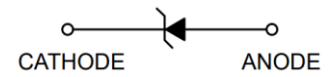
FEATURE

- Zener Voltage Range: 2.2V to 75V
- Power Dissipation: 500mW
- Zener Voltage Tolerance $\pm 5\%$
- Planar Die Construction
- Non-Standard Zener Voltage and Tolerance available
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: DO-35G, Hermetical Sealed Glass Molded
- Polarity; Cathode Indicated by Band



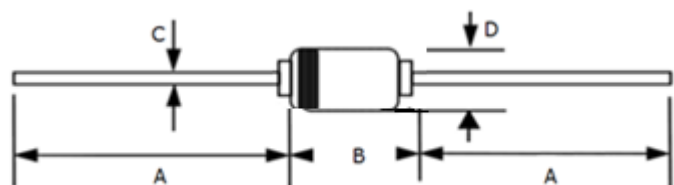
MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	500	mW
Forward Voltage at $I_F=200\text{mA}$	V_F	1.1	V
Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3	K/mW
Junction Temperature	T_J	-65~+175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~+175	$^{\circ}\text{C}$

Note: $T_A=25^{\circ}\text{C}$ unless otherwise noted

DIMENSIONS

Item	DO-35	
	Min. (mm)	Max. (mm)
A	26.0	--
B	--	4.2
C	--	0.5
D	--	2.0



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ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage				Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=0.25mA$		Max Reverse Leakage Current	
	V_Z at I_{ZT}			I_{ZT} (mA)	Z_{ZT} (Ω)	Z_{ZK} (Ω)	I_R at V_R	
	Nom (V)	Min (V)	Max (V)				(μA)	(V)
1N5220BG	2.2	2.09	2.31	20	30	1150	100	1.0
1N5221BG	2.4	2.28	2.52	20	30	1200	100	1.0
1N5222BG	2.5	2.38	2.62	20	30	1250	100	1.0
1N5223BG	2.7	2.57	2.83	20	30	1300	75	1.0
1N5224BG	2.8	2.66	2.94	20	30	1400	75	1.0
1N5225BG	3.0	2.85	3.15	20	29	1600	50	1.0
1N5226BG	3.3	3.14	3.46	20	28	1600	25	1.0
1N5227BG	3.6	3.42	3.78	20	24	1700	15	1.0
1N5228BG	3.9	3.71	4.09	20	23	1900	10	1.0
1N5229BG	4.3	4.09	4.51	20	22	2000	5.0	1.0
1N5230BG	4.7	4.47	4.93	20	19	1900	5.0	2.0
1N5231BG	5.1	4.85	5.35	20	17	1600	5.0	2.0
1N5232BG	5.6	5.32	5.88	20	11	1600	5.0	3.0
1N5233BG	6.0	5.70	6.30	20	7	1600	5.0	3.5
1N5234BG	6.2	5.89	6.51	20	7	1000	5.0	4.0
1N5235BG	6.8	6.46	7.14	20	5	750	3.0	5.0
1N5236BG	7.5	7.13	7.87	20	6	500	3.0	6.0
1N5237BG	8.2	7.79	8.61	20	8	500	3.0	6.5
1N5238BG	8.7	8.27	9.13	20	8	600	3.0	6.5
1N5239BG	9.1	8.65	9.55	20	10	600	3.0	7.0
1N5240BG	10	9.50	10.50	20	17	600	3.0	8.0
1N5241BG	11	10.45	11.55	20	22	600	2.0	8.4
1N5242BG	12	11.40	12.60	20	30	600	1.0	9.1
1N5243BG	13	12.35	13.65	9.5	13	600	0.5	9.9
1N5244BG	14	13.30	14.70	9.0	15	600	0.1	10
1N5245BG	15	14.25	15.75	8.5	16	600	0.1	11
1N5246BG	16	15.20	16.80	7.8	17	600	0.1	12
1N5247BG	17	16.15	17.85	7.4	19	600	0.1	13
1N5248BG	18	17.10	18.90	7.0	21	600	0.1	14
1N5249BG	19	18.05	19.95	6.6	23	600	0.1	14
1N5250BG	20	19.00	21.00	6.2	25	600	0.1	15
1N5251BG	22	20.90	23.10	5.6	29	600	0.1	17
1N5252BG	24	22.80	25.20	5.2	33	600	0.1	18
1N5253BG	25	23.75	26.25	5.0	35	600	0.1	19
1N5254BG	27	25.65	28.35	4.6	41	600	0.1	21
1N5255BG	28	26.60	29.40	4.5	44	600	0.1	21

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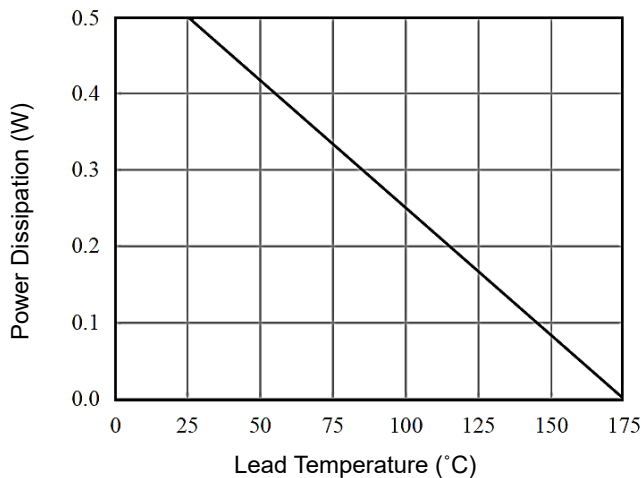
Part Number	Nominal Zener Voltage				Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=0.25mA$		Max Reverse Leakage Current	
	V_Z at I_{ZT}			I_{ZT}	Z_{ZT}	Z_{ZK}	I_R at V_R	
	Nom (V)	Min (V)	Max (V)	(mA)	(Ω)	(Ω)	(μA)	(V)
1N5256BG	30	28.50	31.50	4.2	49	600	0.1	23
1N5257BG	33	31.35	34.65	3.8	58	700	0.1	25
1N5258BG	36	34.20	37.80	3.4	70	700	0.1	27
1N5259BG	39	37.05	40.95	3.2	80	800	0.1	30
1N5260BG	43	40.85	45.15	3.0	93	900	0.1	33
1N5261BG	47	44.65	49.35	2.7	105	1000	0.1	36
1N5262BG	51	48.45	53.55	2.5	125	1100	0.1	39
1N5263BG	56	53.20	58.80	2.2	150	1300	0.1	43
1N5264BG	60	57.00	63.00	2.1	170	1400	0.1	46
1N5265BG	62	58.90	65.10	2.0	185	1400	0.1	47
1N5266BG	68	64.60	71.40	1.8	230	1600	0.1	52
1N5267BG	75	71.25	78.75	1.7	270	1700	0.1	56

Note:

1. $T_A=25^\circ C$ unless otherwise noted
2. Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

CHARACTERISTIC CURVES

Power Derating



*Specifications subject to change without notice.