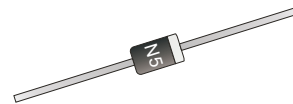


1N5221B-G Thru. 1N5267B-G

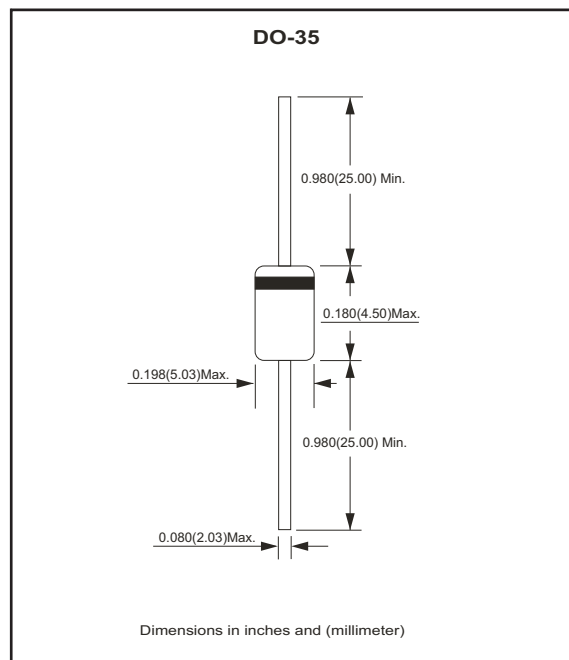
Voltage: 2.4 to 75 Volts**Power: 0.5 Watts****RoHS Device**

Features

- Silicon planar power Zener diode.
- The Zener voltages are graded according to the international E24 standard, smaller voltage tolerances and other zener voltages are available upon request.
- High reliability.

Mechanical data

- Case: Molded plastic, DO-35
- Polarity: Indicated by cathode band
- Marking: Type number
- Weight: 0.012ounce, 0.33gram



Maximum Ratings ($T_A=25^{\circ}\text{C}$, unless otherwise noted)

Parameter	Test Condition	Symbol	Value	Unit
Power dissipation	$T_J \leq 25^{\circ}\text{C}$	P_V	500	mW
Z-current		I_Z	P_V/V_Z	mA
Thermal resistance (junction to ambient air)	$l = 4\text{mm}$, $T_L = \text{constant}$	$R_{\theta JA}$	300	$^{\circ}\text{C/W}$
Junction temperature		T_J	175	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-65 ~ +175	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$, unless otherwise noted)

Parameter	Test Condition	Symbol	Min	Max	Unit
Forward voltage	$I_F = 200\text{mA}$	V_F		1.1	V

Electrical Characteristics (1N5221B-G Thru. 1N5267B-G)

Part No.	Nominal Zener Voltage ⁽¹⁾	Test Current	Maximum Dynamic Impedance ⁽¹⁾	Maximum Dynamic Impedance	Typical Temperature of Coefficient	Maximum Reverse Leakage Current	
	V _{Z@I_{ZT}}	I _{ZT}	Z _{ZT@I_{ZT}}	Z _{ZK@I_{ZK} = 0.25mA}	@I _{ZT}	I _R	V _R
	V	mA	Ω	Ω	α(%/°C)	μA	V
1N5221B-G	2.4	20	30	1200	-0.085	100	1
1N5222B-G	2.5	20	30	1250	-0.085	100	1
1N5223B-G	2.7	20	30	1300	-0.08	75	1
1N5224B-G	2.8	20	30	1400	-0.08	75	1
1N5225B-G	3	20	29	1600	-0.075	50	1
1N5226B-G	3.3	20	28	1600	-0.07	25	1
1N5227B-G	3.6	20	24	1700	-0.065	15	1
1N5228B-G	3.9	20	23	1900	-0.06	10	1
1N5229B-G	4.3	20	22	2000	0.055	5	1
1N5230B-G	4.7	20	19	1900	0.03	5	2
1N5231B-G	5.1	20	17	1600	0.03	5	2
1N5232B-G	5.6	20	11	1600	0.038	5	3
1N5233B-G	6	20	7	1600	0.038	5	3.5
1N5234B-G	6.2	20	7	1000	0.045	5	4
1N5235B-G	6.8	20	5	750	0.05	3	5
1N5236B-G	7.5	20	6	500	0.058	3	6
1N5237B-G	8.2	20	8	500	0.062	3	6.5
1N5238B-G	8.7	20	8	600	0.065	3	6.5
1N5239B-G	9.1	20	10	600	0.068	3	7
1N5240B-G	10	20	17	600	0.075	3	8
1N5241B-G	11	20	22	600	0.076	2	8.4
1N5242B-G	12	20	30	600	0.077	1	9.1
1N5243B-G	13	9.5	13	600	0.079	0.5	9.9
1N5244B-G	14	9	15	600	0.082	0.1	10
1N5245B-G	15	8.5	16	600	0.082	0.1	11
1N5246B-G	16	7.8	17	600	0.083	0.1	12
1N5247B-G	17	7.4	19	600	0.084	0.1	13
1N5248B-G	18	7	21	600	0.085	0.1	14
1N5249B-G	19	6.6	23	600	0.086	0.1	14
1N5250B-G	20	6.2	25	600	0.086	0.1	15
1N5251B-G	22	5.6	29	600	0.087	0.1	17
1N5252B-G	24	5.2	33	600	0.088	0.1	18
1N5253B-G	25	5	35	600	0.089	0.1	19
1N5254B-G	27	4.6	41	600	0.09	0.1	21
1N5255B-G	28	4.5	44	600	0.091	0.1	21
1N5256B-G	30	4.2	49	600	0.091	0.1	23
1N5257B-G	33	3.8	58	700	0.092	0.1	25
1N5258B-G	36	3.4	70	700	0.093	0.1	27
1N5259B-G	39	3.2	80	800	0.094	0.1	30
1N5260B-G	43	3	93	900	0.095	0.1	33
1N5261B-G	47	2.7	105	1000	0.095	0.1	36
1N5262B-G	51	2.5	125	1100	0.096	0.1	39
1N5263B-G	56	2.2	150	1300	0.096	0.1	43
1N5264B-G	60	2.1	170	1400	0.097	0.1	46
1N5265B-G	62	2	185	1400	0.097	0.1	47
1N5266B-G	68	1.8	230	1600	0.097	0.1	52
1N5267B-G	75	1.7	270	1700	0.098	0.1	56

(1)Base on DC measurement at thermal equilibrium; lead length=9.5(3/8"); thermal resistance of heat sink=30 °C/W

Characteristics Curves (1N5221B-G Thru. 1N5267B-G)

Fig. 1 Typical Change of Working Voltage under Operating Conditions at $T_A=25\text{ }^{\circ}\text{C}$

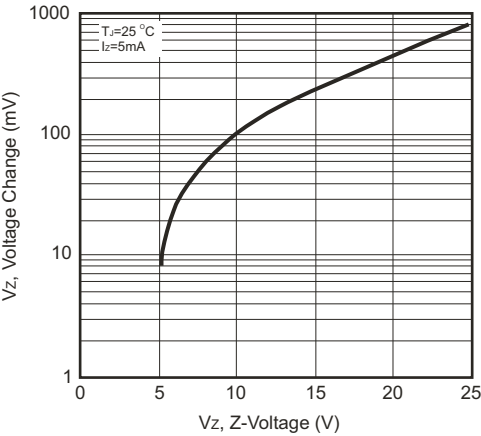


Fig. 2 Typical Change of Working Voltage vs Junction Temperature

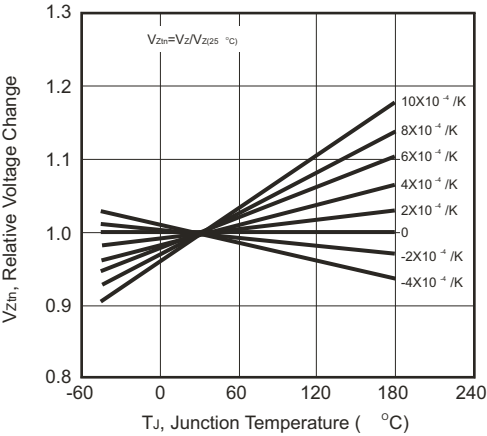


Fig. 3 Total Power Dissipation vs Ambient Temperature

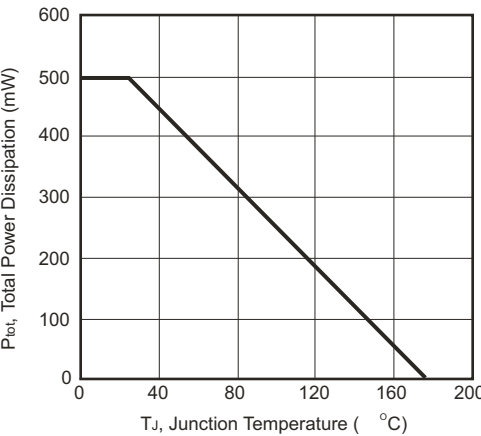


Fig. 4 Thermal Resistance vs Lead Length

