Zener diode

Features

1. High reliability
2. Very sharp reverse characteristic
3. Low reverse current level
4. V_Z -tolerance±5%

Applications

Voltage stabilization

Absolute Maximum Ratings

T_j=25℃

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	T_{amb}≤75℃		P_V	500	mW
Z-current			I_Z	P_V /V_Z	mA
Junction temperature			T_j	200	℃
Storage temperature range			T_{stg}	-65~+200	℃

Maximum Thermal Resistance

T_j=25℃

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	l=9.5mm(3/8") T_L=constant	R_{thJA}	300	K/W

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

Electrical Characteristics

T_j=25℃

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=200mA		V_F			1.1	V

Type	V_{Znom} 1)	I_{ZT} for	r_{zjT}	r_{zjK} at	I_{ZK}	I_R at	V_R	TK_{VZ}
	V	mA	Ω	Ω	mA	μ A	V	%/K
1N5221B	2.4	20	<30	<1200	0.25	<100	1.0	<-0.085
1N5222B	2.5	20	<30	<1250	0.25	<100	1.0	<-0.085
1N5223B	2.7	20	<30	<1300	0.25	<75	1.0	<-0.080
1N5224B	2.8	20	<30	<1400	0.25	<75	1.0	<-0.080
1N5225B	3.0	20	<29	<1600	0.25	<50	1.0	<-0.075
1N5226B	3.3	20	<28	<1600	0.25	<25	1.0	<-0.070
1N5227B	3.6	20	<24	<1700	0.25	<15	1.0	<-0.065
1N5228B	3.9	20	<23	<1900	0.25	<10	1.0	<-0.060
1N5229B	4.3	20	<22	<2000	0.25	<5	1.0	<+0.055
1N5230B	4.7	20	<19	<1900	0.25	<5	2.0	<+0.030
1N5231B	5.1	20	<17	<1600	0.25	<5	2.0	<+0.030
1N5232B	5.6	20	<11	<1600	0.25	<5	3.0	<+0.038
1N5233B	6.0	20	<7	<1600	0.25	<5	3.5	<+0.038
1N5234B	6.2	20	<7	<1000	0.25	<5	4.0	<+0.045
1N5235B	6.8	20	<5	<750	0.25	<3	5.0	<+0.050
1N5236B	7.5	20	<6	<500	0.25	<3	6.0	<+0.058
1N5237B	8.2	20	<8	<500	0.25	<3	6.5	<+0.062
1N5238B	8.7	20	<8	<600	0.25	<3	6.5	<+0.065
1N5239B	9.1	20	<10	<600	0.25	<3	7.0	<+0.068
1N5240B	10	20	<17	<600	0.25	<3	8.0	<+0.075
1N5241B	11	20	<22	<600	0.25	<2	8.4	<+0.076
1N5242B	12	20	<30	<600	0.25	<1	9.1	<+0.077
1N5243B	13	9.5	<13	<600	0.25	<0.5	9.9	<+0.079
1N5244B	14	9.0	<15	<600	0.25	<0.1	10	<+0.082
1N5245B	15	8.5	<16	<600	0.25	<0.1	11	<+0.082
1N5246B	16	7.8	<17	<600	0.25	<0.1	12	<+0.083
1N5247B	17	7.4	<19	<600	0.25	<0.1	13	<+0.084
1N5248B	18	7.0	<21	<600	0.25	<0.1	14	<+0.085
1N5249B	19	6.6	<23	<600	0.25	<0.1	15	<+0.086
1N5250B	20	6.2	<25	<600	0.25	<0.1	16	<+0.086
1N5251B	22	5.6	<29	<600	0.25	<0.1	17	<+0.087
1N5252B	24	5.2	<33	<600	0.25	<0.1	18	<+0.088
1N5253B	25	5.0	<35	<600	0.25	<0.1	19	<+0.089
1N5254B	27	4.6	<41	<600	0.25	<0.1	21	<+0.090
1N5255B	28	4.5	<44	<600	0.25	<0.1	21	<+0.091
1N5256B	30	4.2	<49	<600	0.25	<0.1	23	<+0.091
1N5257B	33	3.8	<58	<700	0.25	<0.1	25	<+0.092
1N5258B	36	3.4	<70	<700	0.25	<0.1	27	<+0.093
1N5259B	39	3.2	<80	<800	0.25	<0.1	30	<+0.094
1N5260B	43	3.0	<93	<900	0.25	<0.1	33	<+0.095
1N5261B	47	2.7	<105	<1000	0.25	<0.1	36	<+0.095
1N5262B	51	2.5	<125	<1100	0.25	<0.1	39	<+0.096
1N5263B	56	2.2	<150	<1300	0.25	<0.1	43	<+0.096
1N5264B	60	2.1	<170	<1400	0.25	<0.1	46	<+0.097
1N5265B	62	2.0	<185	<1400	0.25	<0.1	47	<+0.097
1N5266B	68	1.8	<230	<1600	0.25	<0.1	52	<+0.097
1N5267B	75	1.7	<270	<1700	0.25	<0.1	58	<+0.098

Type	V_{Znom} 1)	I_{ZT} for	r_{zjT}	r_{zjK} at	I_{ZK}	I_R at	V_R	TK_{VZ}
	V	mA	Ω	Ω	mA	μA	V	%/K
1N5268B	82	1.5	<330	<2000	0.25	<0.1	62	<+0.098
1N5269B	87	1.4	<370	<2200	0.25	<0.1	68	<+0.099
1N5270B	91	1.4	<400	<2300	0.25	<0.1	69	<+0.099
1N5271B	100	1.3	<500	<2600	0.25	<0.1	76	<+0.11
1N5272B	110	1.1	<750	<3000	0.25	<0.1	84	<+0.11
1N5273B	120	1	<900	<3000	0.25	<0.1	91	<+0.11
1N5274B	130	0.95	<1100	<4000	0.25	<0.1	99	<+0.11
1N5275B	140	0.9	<1300	<4500	0.25	<0.1	106	<+0.11
1N5276B	150	0.85	<1500	<4500	0.25	<0.1	114	<+0.11
1N5277B	160	0.8	<1700	<5000	0.25	<0.1	122	<+0.11
1N5278B	170	0.74	<1900	<5500	0.25	<0.1	129	<+0.11
1N5279B	180	0.68	<2200	<6000	0.25	<0.1	137	<+0.11
1N5280B	190	0.66	<2400	<6500	0.25	<0.1	144	<+0.11
1N5281B	200	0.65	<2500	<7000	0.25	<0.1	152	<+0.11

1) Based on DC-measurement at thermal equilibrium while maintaining the lead temperature(T_L) at 30℃, 9.5mm (3/8") from the diode body.

Characteristics (T_j=25℃ unless otherwise specified)

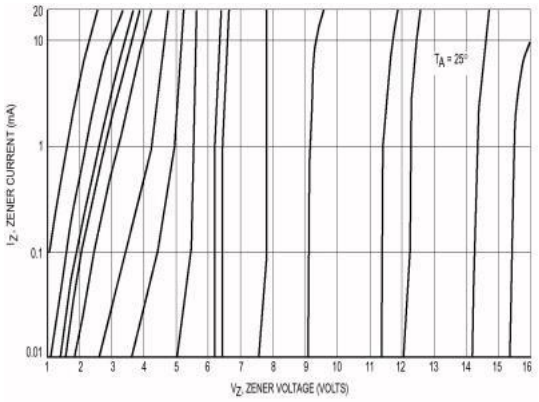


Figure 1. Zener Voltage versus Zener Current – Vz=1 thru 16 Volts

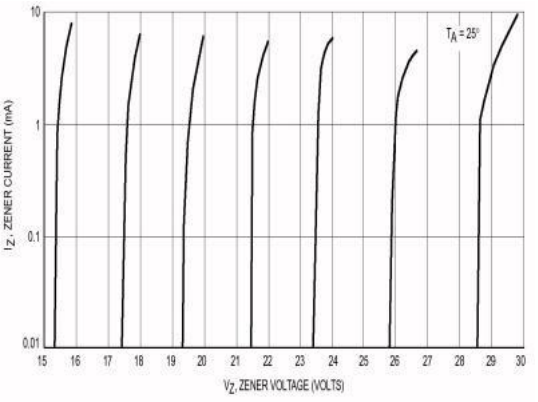


Figure 2. Zener Voltage versus Zener Current – Vz=15 thru 30 Volts

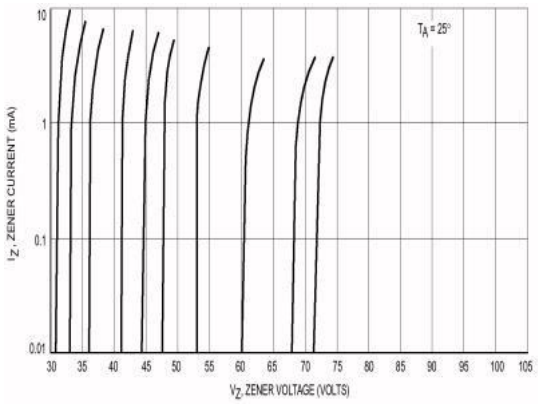


Figure 3. Zener Voltage versus Zener Curren

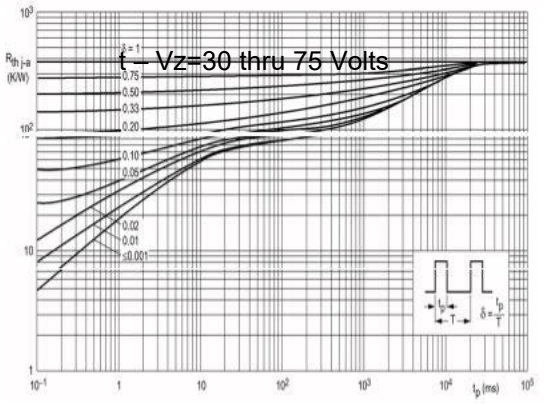
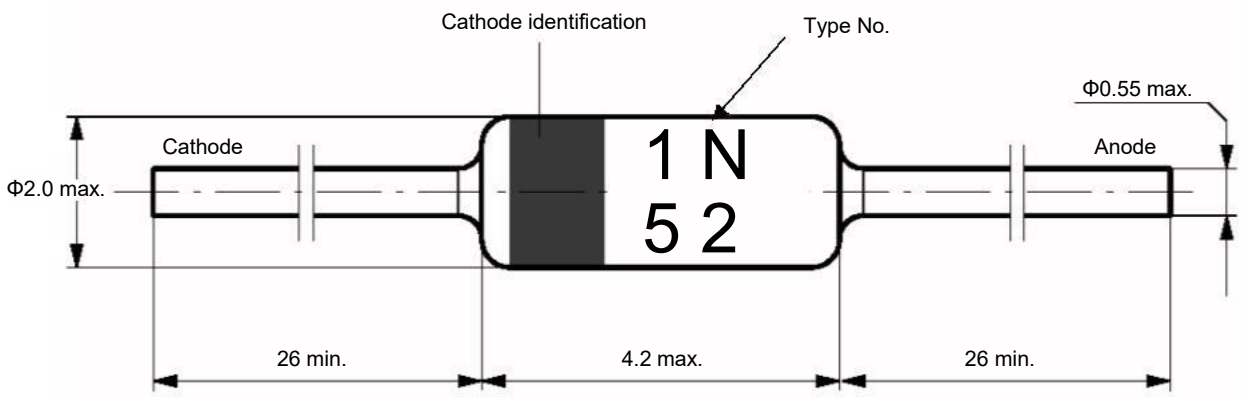


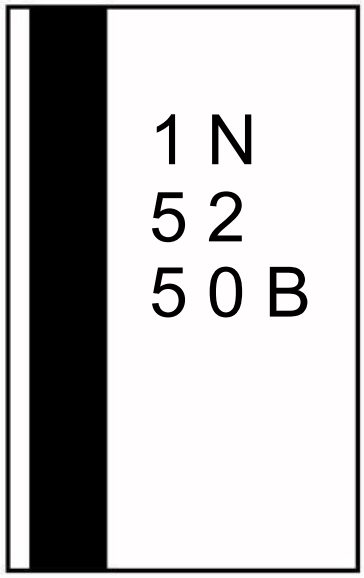
Figure 4. Thermal resistance from junction to ambient as a function of pulse duration

Dimensions in mm



Standard Glass Case
JEDEC DO-35

Marking



单击下面可查看定价，库存，交付和生命周期等信息

>>COMON(阔迈)