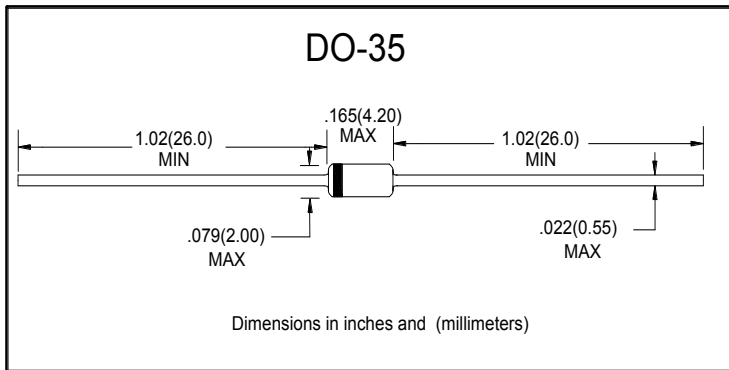


## Zener Diodes



### Features

- $P_{tot}$  500mW
- $V_z$  2.4V-68V

### ■ Limiting Values (Absolute Maximum Rating)

Item	SYMBOL	Unit	Conditions	Max
Power dissipation	$P_{tot}$	mW	$T_A=25^{\circ}\text{C}$	500
Zener current	$I_z$	mA		$P_{tot}/V_z$
Maximum junction temperature	$T_j$	$^{\circ}\text{C}$		175
Storage temperature range	$T_{stg}$	$^{\circ}\text{C}$		-65 to +175

### ■ Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	SYMBOL	Unit	Conditions	Max
Thermal resistance	$R_{\theta JA}$	$^{\circ}\text{C}/\text{mW}$		0.3
Forward voltage	$V_F$	V	$I_F=200\text{mA}$	1.1



# 1N52 SERIES

## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type	Nominal Zener voltage <sup>1)</sup>	Test current	Maximum dynamic impedance resistance <sup>1)</sup>	Maximum dynamic impedance resistance	Reverse leakage current	
	at I <sub>ZT</sub> , V <sub>Z</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> at I <sub>ZT</sub>	Z <sub>ZK</sub> at I <sub>ZK</sub> =0.25mA	I <sub>R</sub>	V <sub>R</sub>
	V	mA	Ω	Ω	μA	V
1N5221	2.4	20	30	1200	100	1
1N5222	2.5	20	30	1250	100	1
1N5223	2.7	20	30	1300	75	1
1N5224	2.8	20	30	1400	75	1
1N5225	3	20	29	1600	50	1
1N5226	3.3	20	28	1600	25	1
1N5227	3.6	20	24	1700	15	1
1N5228	3.9	20	23	1900	10	1
1N5229	4.3	20	22	2000	5	1
1N5230	4.7	20	19	1900	5	2
1N5231	5.1	20	17	1600	5	2
1N5232	5.6	20	11	1600	5	3
1N5233	6	20	7	1600	5	3.5
1N5234	6.2	20	7	1000	5	4
1N5235	6.8	20	5	750	3	5
1N5236	7.5	20	6	500	3	6
1N5237	8.2	20	8	500	3	6.5
1N5238	8.7	20	8	600	3	6.5
1N5239	9.1	20	10	600	3	7
1N5240	10	20	17	600	3	8
1N5241	11	20	22	600	2	8.4



## 1N52 SERIES

1N5242	12	20	30	600	1	9.1
1N5243	13	9.5	13	600	0.5	9.9
1N5244	14	9	15	600	0.1	10
1N5245	15	8.5	16	600	0.1	11
1N5246	16	7.8	17	600	0.1	12
1N5247	17	7.4	19	600	0.1	13
1N5248	18	7	21	600	0.1	14
1N5249	19	6.6	23	600	0.1	14
1N5250	20	6.2	25	600	0.1	15
1N5251	22	5.6	29	600	0.1	17
1N5252	24	5.2	33	600	0.1	18
1N5253	25	5	35	600	0.1	19
1N5254	27	4.6	41	600	0.1	21
1N5255	28	4.5	44	600	0.1	21
1N5256	30	4.2	49	600	0.1	23
1N5257	33	3.8	58	700	0.1	25
1N5258	36	3.4	70	700	0.1	27
1N5259	39	3.2	80	800	0.1	30
1N5260	43	3	93	900	0.1	33
1N5261	47	2.7	105	1000	0.1	36
1N5262	51	2.5	125	1100	0.1	39
1N5263	56	2.2	150	1300	0.1	43
1N5264	60	2.1	170	1400	0.1	46
1N5265	62	2	185	1400	0.1	47
1N5266	68	1.8	230	1600	0.1	52



# 1N52 SERIES

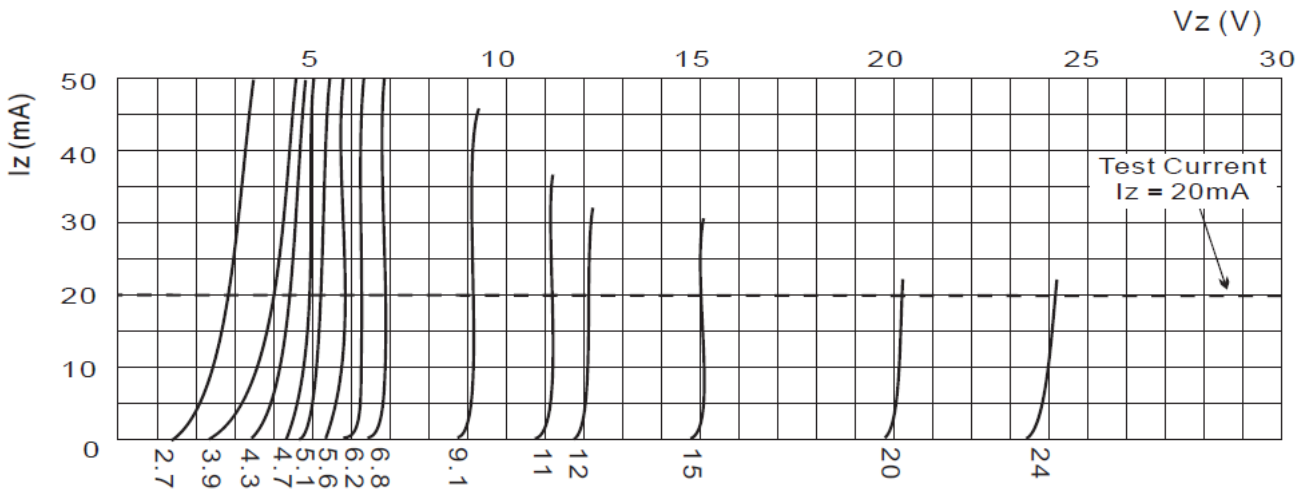
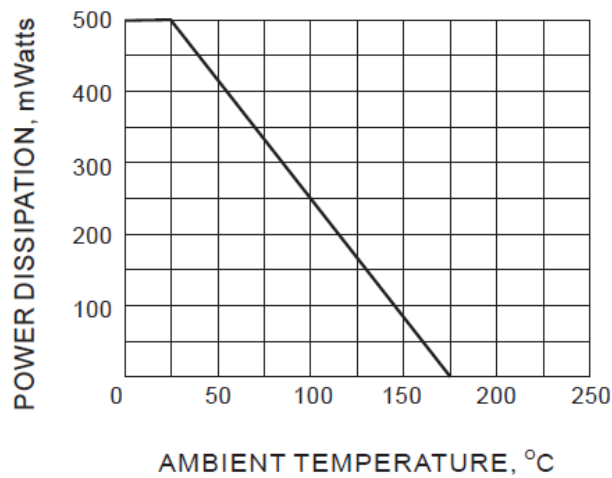
1) Based on dc-measurement at thermal equilibrium; lead length = 9.5 (3/8 "); thermal resistance of heat sink = 30 °C/W

2) STANDARD VOLTAGE TOLERANCE IS +5% AND  
SUFFIX "A" FOR +3%  
SUFFIX "B" FOR +5%  
SUFFIX "C" FOR +10%  
SUFFIX "D" FOR +20%

## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	DELIVERY MODE
1N52 SERIES	D1	Approximate 0.0001224	5000	150000	TB

## ■ Characteristics(Typical)





# 1N52 SERIES

---

## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.