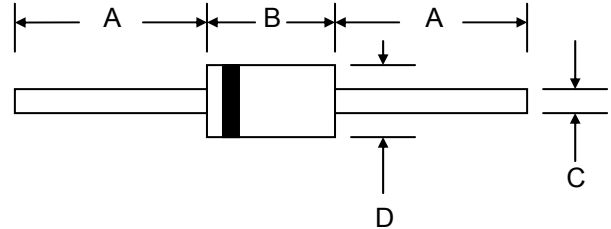


Features

- Glass Passivated Die Construction
- 5.0W Power Dissipation
- 3.3V – 200V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Low Inductance
- For Use in Voltage Regulator or Reference
- Plastic Case Material has UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: DO-15 (1N5333B thru 1N5340B) or DO-201AE (1N5341B thru 1N5388B)
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.4 grams (DO-15) or 1.2 grams (DO-201AE)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 6**

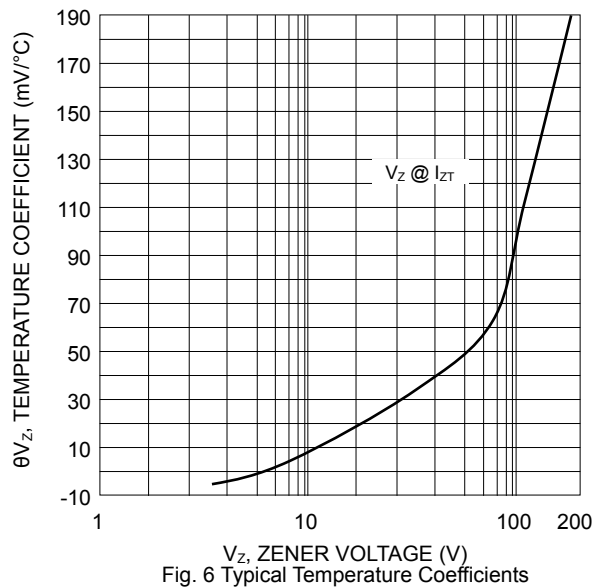
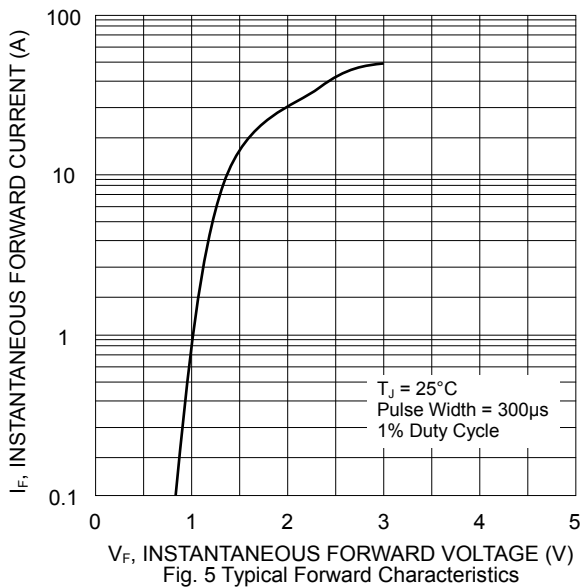
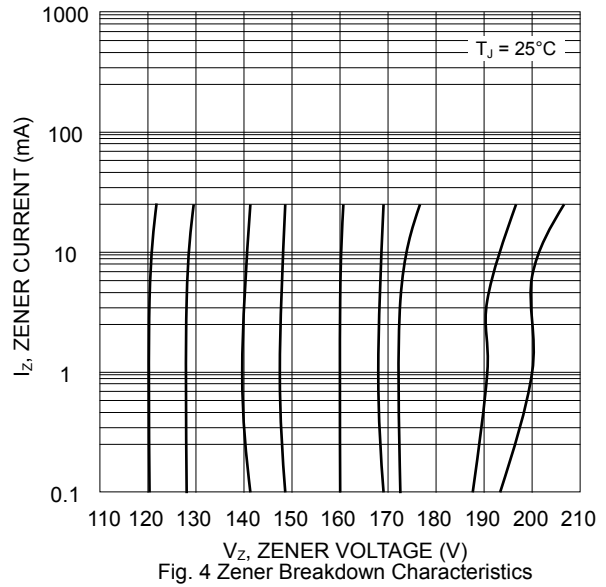
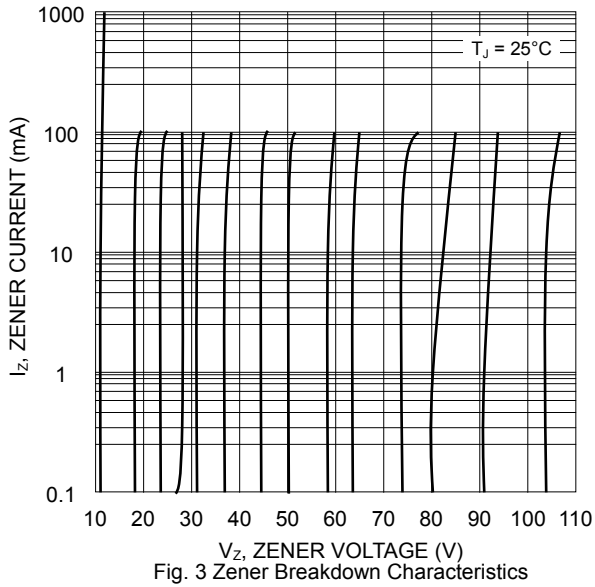
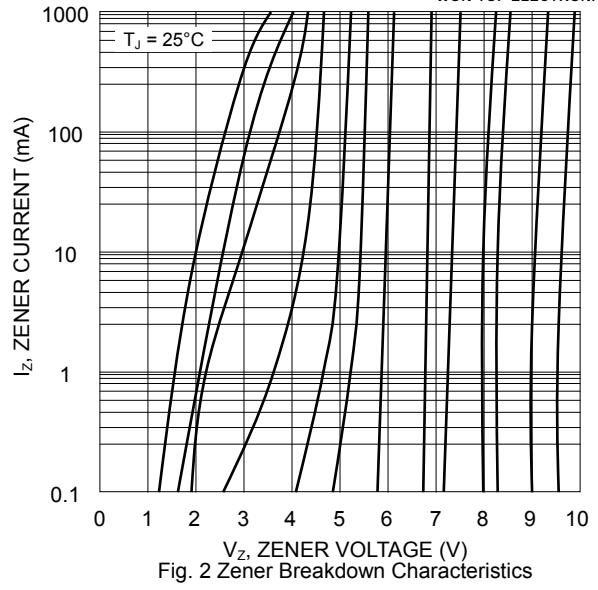
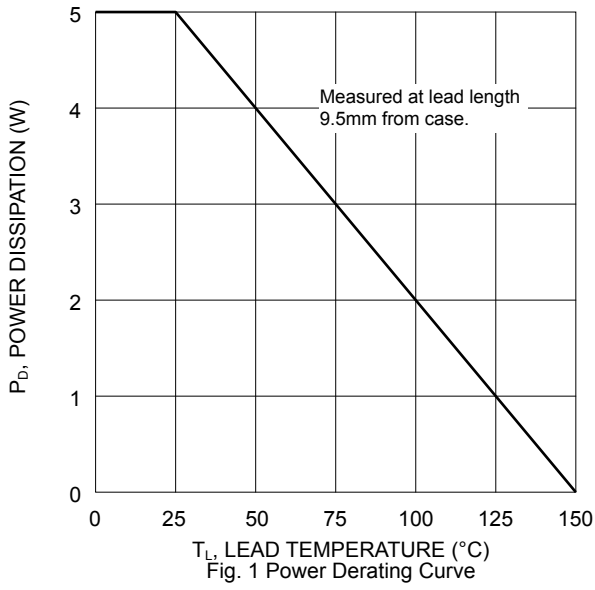
Dim	DO-15		DO-201AE	
	Min	Max	Min	Max
A	25.4	—	25.4	—
B	5.50	7.62	7.20	9.50
C	0.71	0.864	0.94	1.07
D	2.60	3.60	4.80	5.30
All Dimensions in mm				

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation at T _L = 25°C (Note 1) Derate above 25°C	P _D	5.0 40	W mW/°C
Forward Voltage @ I _F = 1.0A	V _F	1.2	V
Thermal Resistance, Junction to Ambient (Note 2) Thermal Resistance, Junction to Lead (Note 1)	R _{JA} R _{JL}	85 25	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

- Note: 1. Measured at lead length 3/8" (9.5mm) from body.
2. Mounted on FR-4 PCB with 2.0 x 2.0mm copper pads and track width 1.0mm, length 25mm.

1N5333B – 1N5388B



Electrical Characteristics (@T_A=25°C unless otherwise specified) Table 1

Type Number (Note 1)	Nominal Zener Voltage (Note 2)	Test Current	Maximum Zener Impedance (Note 3)			Maximum Leakage Current		Max DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	()	()	(mA)	(μA)	(V)	(mA)
1N5333B	3.3	380	3.0	400	1.0	300	1.0	1440.0
1N5334B	3.6	350	2.5	500	1.0	150	1.0	1320.0
1N5335B	3.9	320	2.0	500	1.0	50	1.0	1220.0
1N5336B	4.3	290	2.0	500	1.0	10	1.0	1100.0
1N5337B	4.7	260	2.0	450	1.0	5.0	1.0	1010.0
1N5338B	5.1	240	1.5	400	1.0	1.0	1.0	930.0
1N5339B	5.6	220	1.0	400	1.0	1.0	2.0	865.0
1N5340B	6.0	200	1.0	300	1.0	1.0	3.0	790.0
1N5341B	6.2	200	1.0	200	1.0	1.0	3.0	765.0
1N5342B	6.8	175	1.0	200	1.0	10	5.2	700.0
1N5343B	7.5	175	1.5	200	1.0	10	5.7	630.0
1N5344B	8.2	150	1.5	200	1.0	10	6.2	580.0
1N5345B	8.7	150	2.0	200	1.0	10	6.6	545.0
1N5346B	9.1	150	2.0	150	1.0	7.5	6.9	520.0
1N5347B	10	125	2.0	125	1.0	5.0	7.6	475.0
1N5348B	11	125	2.5	125	1.0	5.0	8.4	430.0
1N5349B	12	100	2.5	125	1.0	2.0	9.1	395.0
1N5350B	13	100	2.5	100	1.0	1.0	9.9	365.0
1N5351B	14	100	2.5	75	1.0	1.0	10.6	340.0
1N5352B	15	75	2.5	75	1.0	1.0	11.5	315.0
1N5353B	16	75	2.5	75	1.0	1.0	12.2	295.0
1N5354B	17	70	2.5	75	1.0	0.5	12.9	280.0
1N5355B	18	65	2.5	75	1.0	0.5	13.7	264.0
1N5356B	19	65	3.0	75	1.0	0.5	14.4	250.0
1N5357B	20	65	3.0	75	1.0	0.5	15.2	237.0
1N5358B	22	50	3.5	75	1.0	0.5	16.7	216.0
1N5359B	24	50	3.5	100	1.0	0.5	18.2	198.0
1N5360B	25	50	4.0	110	1.0	0.5	19.0	190.0
1N5361B	27	50	5.0	120	1.0	0.5	20.6	176.0
1N5362B	28	50	6.0	130	1.0	0.5	21.2	170.0
1N5363B	30	40	8.0	140	1.0	0.5	22.8	158.0
1N5364B	33	40	10	150	1.0	0.5	25.1	144.0
1N5365B	36	30	11	160	1.0	0.5	27.4	132.0
1N5366B	39	30	14	170	1.0	0.5	29.7	122.0
1N5367B	43	30	20	190	1.0	0.5	32.7	110.0
1N5368B	47	25	25	210	1.0	0.5	35.8	100.0
1N5369B	51	25	27	230	1.0	0.5	38.8	93.0
1N5370B	56	20	35	280	1.0	0.5	42.6	86.0
1N5371B	60	20	40	350	1.0	0.5	45.5	79.0
1N5372B	62	20	42	400	1.0	0.5	47.1	76.0

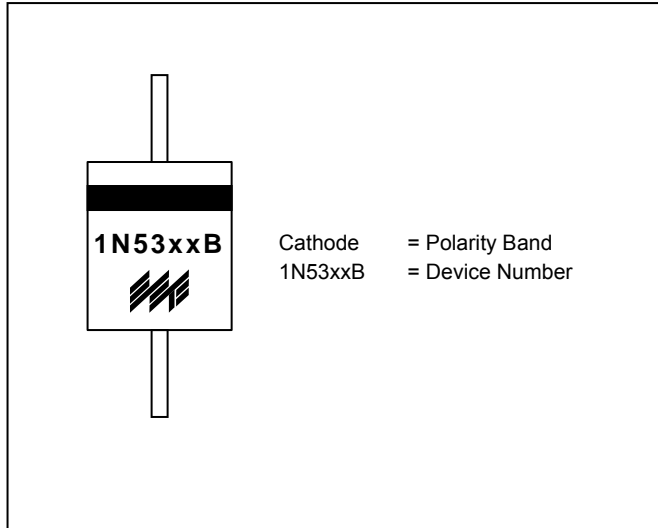
- Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of ±5%.
 2. Measured under thermal equilibrium and DC (I_{ZT}) test conditions.
 3. The Zener impedance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

Electrical Characteristics (@T_A=25°C unless otherwise specified) Table 1 (Cont'd)

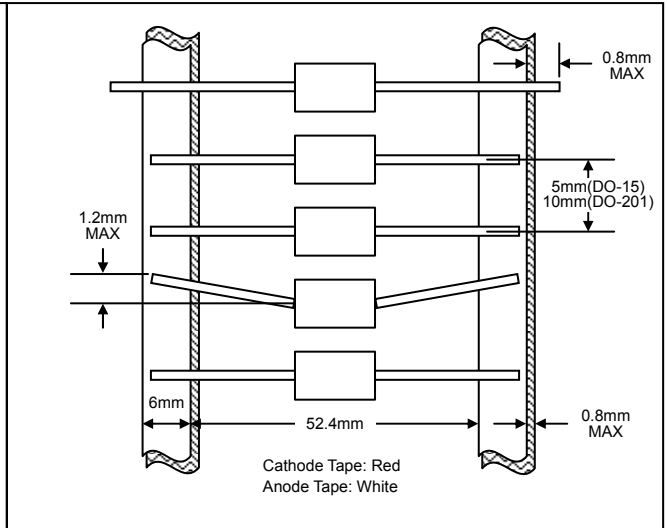
Type Number (Note 1)	Nominal Zener Voltage (Note 2)	Test Current	Maximum Zener Impedance (Note 3)			Maximum Leakage Current		Max DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	()	()	(mA)	(μA)	(V)	(mA)
1N5373B	68	20	44	500	1.0	0.5	51.7	70.0
1N5374B	75	20	45	620	1.0	0.5	56.0	63.0
1N5375B	82	15	65	720	1.0	0.5	62.2	58.0
1N5376B	87	15	75	760	1.0	0.5	66.0	54.5
1N5377B	91	15	75	760	1.0	0.5	69.2	52.5
1N5378B	100	12	90	800	1.0	0.5	76.0	47.5
1N5379B	110	12	125	1000	1.0	0.5	83.6	43.0
1N5380B	120	10	170	1150	1.0	0.5	91.2	39.5
1N5381B	130	10	190	1250	1.0	0.5	98.8	36.6
1N5382B	140	8.0	230	1500	1.0	0.5	106.0	34.0
1N5383B	150	8.0	330	1500	1.0	0.5	114.0	31.6
1N5384B	160	8.0	350	1650	1.0	0.5	122.0	29.4
1N5385B	170	8.0	380	1750	1.0	0.5	129.0	28.0
1N5386B	180	5.0	430	1750	1.0	0.5	137.0	26.4
1N5387B	190	5.0	450	1850	1.0	0.5	144.0	25.0
1N5388B	200	5.0	480	1850	1.0	0.5	152.0	23.6

- Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of ±5%.
 2. Measured under thermal equilibrium and DC (I_{ZT}) test conditions.
 3. The Zener impedance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

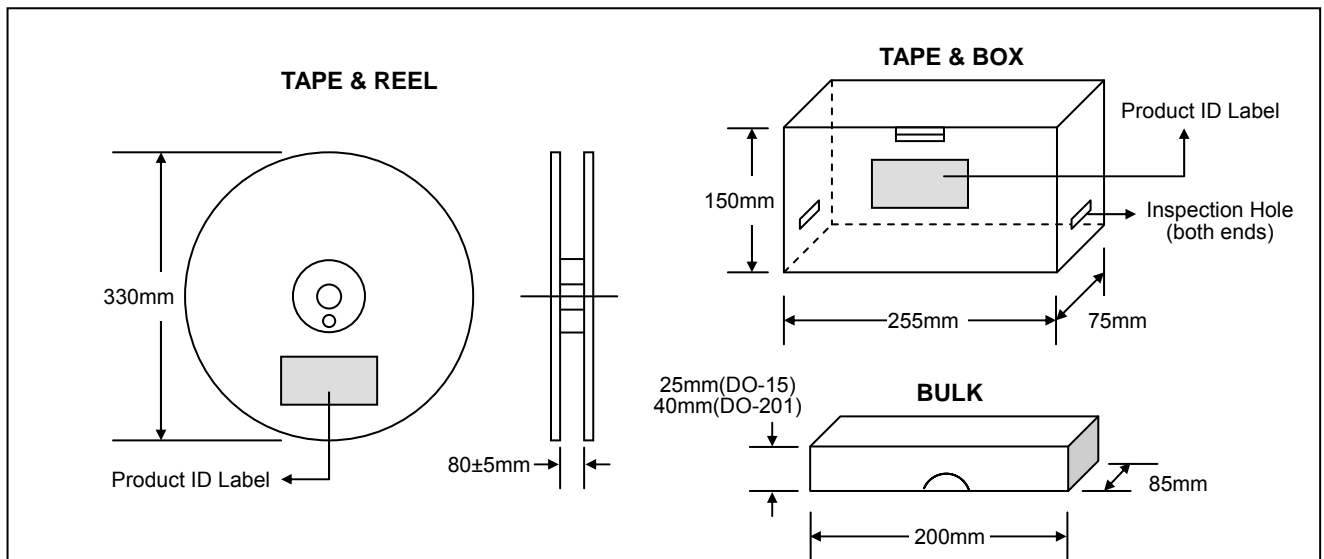
MARKING INFORMATION



TAPING SPECIFICATIONS



PACKAGING INFORMATION




Case	Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
DO-15	TAPE & REEL	330	4,000	370 x 370 x 420	20,000	12.0
	TAPE & BOX	255 x 75 x 150	4,000	400 x 273 x 415	30,000	15.0
	BULK	200 x 85 x 25	1,000	459 x 214 x 256	40,000	17.5
DO-201AE	TAPE & REEL	330	1,250	370 x 370 x 420	6,250	10.0
	TAPE & BOX	255 x 75 x 150	1,250	400 x 273 x 415	12,500	17.5
	BULK	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
2. Components are packed in accordance with EIA standard RS-296-E.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
1N53xxB-T3	DO-15	4000/Tape & Reel
1N53xxB-T3	DO-201AE	1250/Tape & Reel
1N53xxB-TB	DO-15	3000/Tape & Box
1N53xxB-TB	DO-201AE	1250/Tape & Box
1N53xx	DO-15	1000 Units/Box
1N53xx	DO-201AE	500 Units/Box

1. Products listed in **bold** are WTE **Preferred** Devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 1N5333B-TB-LF.**

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Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: http://www.wontop.com

We power your everyday.