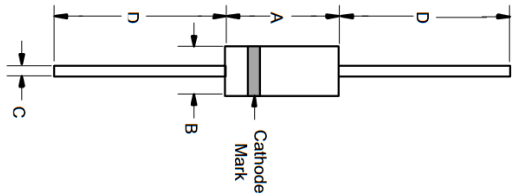


Voltage Regulator Zener Diodes

Primary characteristics		
Parameter	Value	Unit
V_Z	3.6 to 100	V
V_Z tolerance	5	%
P_D	5.0	W

Features

- Pb-free and RoHS compliant
- Built-in strain relief
- Low inductance
- Approx. weight: 1.2g / 0.045oz
- Glass passivated chip
- Solderable per MIL-STD-750, Method 2026
- Case: JEDEC DO-201AE molded plastic
- Plastic package has underwriters laboratory flammability classification 94V-O

Case dimensions				
				
DO-204AC/DO-15				
Unit	A	B	C	D
mm	6.7 ±0.9	3.1 ±0.5	0.75 ±0.15	25.4 MIN

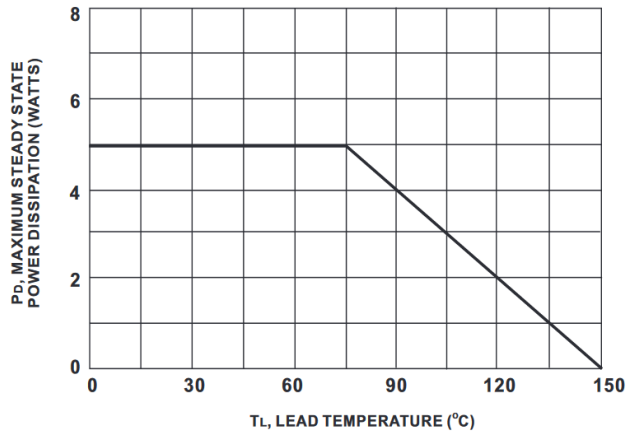
Part numbering system		
1N53 ↓ Series code	43 ↓ Nominal Zener voltage marking (see: Characteristics table)	B

Absolute maximum ratings and general electrical characteristics ($T_a = 25^\circ\text{C}$)			
Parameter	Symbol	Value	Unit
DC Power dissipation on $T_L=75^\circ\text{C}$, at zero lead length Derate above 50°C ¹⁾	P_D	5.0 40	W mW/ $^\circ\text{C}$
Operating junction temperature and storage temperature range	T_j, T_{stg}	-55 ~ 150	$^\circ\text{C}$
Notes:			
1) Mounted on 8.0mm^2 copper pads to each terminal			

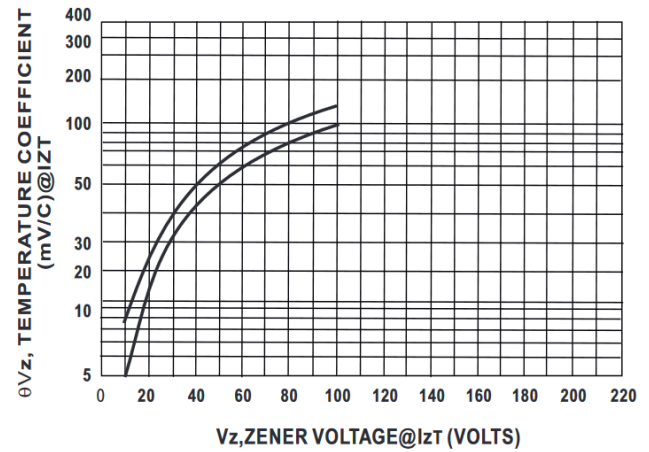
Characteristics table ($T_a = 25^\circ\text{C}$)

Part number	Nominal Zener voltage			Maximum Zener impedance				Maximum leakage current	
	$V_Z @ I_{ZT}$			Z_{ZT}	@ I_{ZT}	Z_{ZT}	@ I_{ZT}	I_R	@ V_R
	Min	Nom.	Max						
	V	V	V		mA	Ω	mA	μA	V
1N5334B	3.4	3.6	3.8	2.5	350	500	1.0	150	1.0
1N5335B	3.7	3.9	4.1	2.0	320	500	1.0	50	1.0
1N5336B	4.1	4.3	4.52	2.0	290	500	1.0	10	1.0
1N5337B	4.5	4.7	4.9	2.0	260	450	1.0	5.0	1.0
1N5338B	4.9	5.1	5.4	1.5	240	400	1.0	1.0	1.0
1N5339B	5.3	5.6	5.9	1.0	220	400	1.0	1.0	2.0
1N5340B	5.7	6.0	6.3	1.0	200	300	1.0	1.0	3.0
1N5341B	5.9	6.2	6.5	1.0	200	200	1.0	1.0	3.0
1N5342B	6.5	6.8	7.1	1.0	175	200	1.0	10	5.2
1N5343B	7.1	7.5	7.9	1.5	175	200	1.0	10	5.7
1N5344B	7.8	8.2	8.6	1.5	150	200	1.0	10	6.2
1N5345B	8.3	8.7	9.1	2.0	150	200	1.0	10	6.6
1N5346B	8.7	9.1	9.6	2.0	150	150	1.0	7.5	6.9
1N5347B	9.5	10	10.5	2.0	125	125	1.0	5.0	7.6
1N5348B	10.5	11	11.6	2.5	125	125	1.0	5.0	8.4
1N5349B	11.4	12	12.6	2.5	100	125	1.0	2.0	9.1
1N5350B	12.4	13	13.7	2.5	100	100	1.0	1.0	9.9
1N5351B	13.3	14	14.7	2.5	100	75	1.0	1.0	10.6
1N5352B	14.3	15	15.8	2.5	75	75	1.0	1.0	11.5
1N5353B	15.2	16	16.8	2.5	75	75	1.0	1.0	12.2
1N5354B	16.2	17	17.9	2.5	70	75	1.0	0.5	12.9
1N5355B	17.1	18	18.9	2.5	65	75	1.0	0.5	13.7
1N5356B	18.1	19	20	3.0	65	75	1.0	0.5	14.4
1N5357B	19	20	21	3.0	65	75	1.0	0.5	15.2
1N5358B	20.9	22	23.1	3.5	50	75	1.0	0.5	16.7
1N5359B	22.8	24	25.2	3.5	50	100	1.0	0.5	18.2
1N5360B	23.8	25	26.3	4.0	50	110	1.0	0.5	19
1N5361B	25.7	27	28.4	5.0	50	120	1.0	0.5	20.6
1N5362B	26.6	28	29.4	6.0	50	130	1.0	0.5	21.2
1N5363B	28.5	30	32	8.0	40	140	1.0	0.5	22.8
1N5364B	31.4	33	34.7	10	40	150	1.0	0.5	25.1
1N5365B	34.2	36	37.8	11	30	160	1.0	0.5	27.4
1N5366B	37.1	39	41	14	30	170	1.0	0.5	29.7
1N5367B	40.9	43	45	20	30	190	1.0	0.5	32.7
1N5368B	44.7	47	49	25	25	210	1.0	0.5	35.8
1N5369B	48.5	51	53.6	27	25	230	1.0	0.5	38.8
1N5370B	53.2	56	58.8	35	20	280	1.0	0.5	42.6
1N5371B	57	60	63	40	20	350	1.0	0.5	45.5
1N5372B	58.9	62	65.1	42	20	400	1.0	0.5	47.1
1N5373B	64.6	68	71.4	44	20	500	1.0	0.5	51.7
1N5374B	71.3	75	78.8	45	20	620	1.0	0.5	56
1N5375B	77.9	82	86.1	65	15	720	1.0	0.5	62.2
1N5376B	82.7	87	91.4	75	15	760	1.0	0.5	66
1N5377B	86.5	91	95.6	75	15	760	1.0	0.5	69.2
1N5378B	95	100	105	90	12	800	1.0	0.5	76

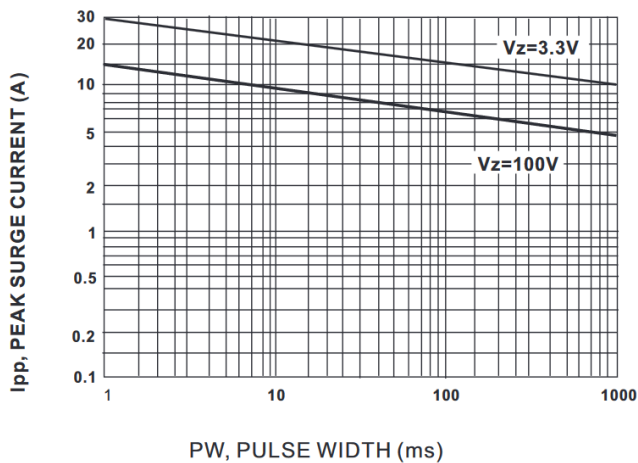
Power temperature derating curve



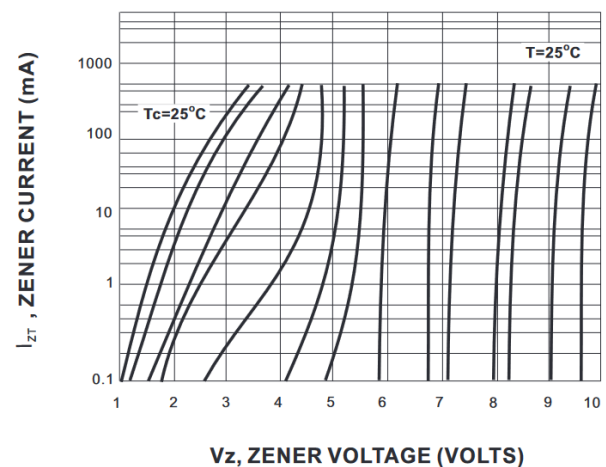
Temperature coefficient-range for units 10 to 100 volts



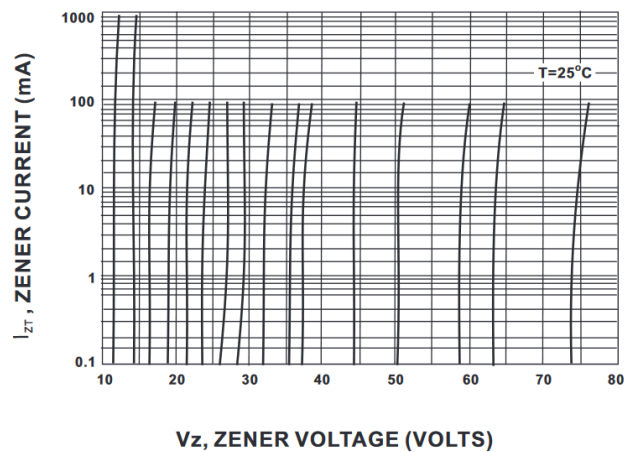
Peak surge current versus pulse width



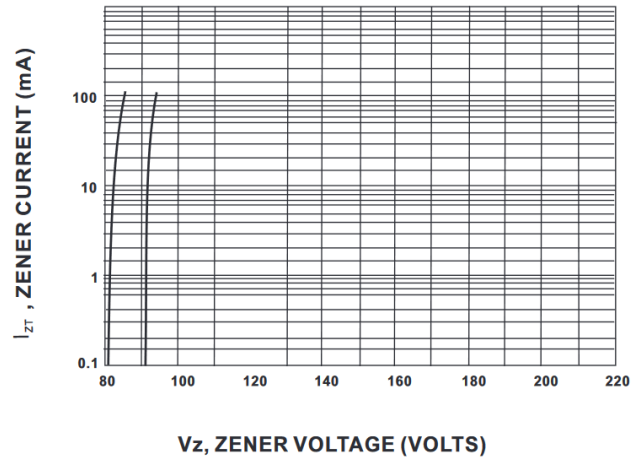
**Zener voltage versus Zener current
 $V_Z = 3.3V$ thru 10V**



**Zener voltage versus Zener current
 $V_Z = 11V$ thru 75V**



Zener voltage versus Zener current $V_Z = 82V$ thru 100V



Ordering information			
Part number	Package	Shipping quantity	Dimensions
1N5334B – 1N5378B	DO-204AC/DO-15	500 pcs / box 3000 pcs / box	---

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