



5W Zener Diode

Vz - 6.2 to 200 V



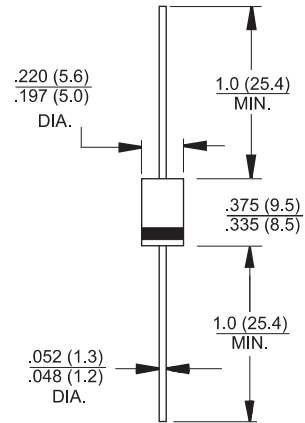
Features

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipat
- For use in stabilizing and clipping circuits with high power rating

Mechanical data

- Case : DO-201AD
- Epoxy : UL94V-0 rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- Weight : 1.071 gram

DO-201AD



Dimensions in inches and (millimeters)

Absolute Maximum Ratings			
Parameter	Symbol	Value	UNIT
DC Power Dissipation at TL = 75 °C (Note1)	P _D	5.0	W
Maximum Forward Voltage at IF = 1 A.	V _F	1.2	V
Junction Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

Note:

(1) TL = Lead temperature at 3/8 " (9.5mm) from body.

DEVICE CHARACTERISTICS

1N53xxB

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Reverse Leakage Current		Max. DC Zener Current	Marking Code
	VZ @ IZT			IZT@ZZT		ZZK@IZK		IR@VR		IZM	
	Min. V	Nom. V	Max. V	mA	Ω	Ω	mA	μ A	V	mA	
1N5341B	5.89	6.2	6.51	200	1	200	1	1	3	765	1N5341B
1N5342B	6.46	6.8	7.14	175	1	200	1	10	5.2	700	1N5342B
1N5343B	7.125	7.5	7.875	175	1.5	200	1	10	5.7	630	1N5343B
1N5344B	7.79	8.2	8.61	150	1.5	200	1	10	6.2	580	1N5344B
1N5345B	8.265	8.7	9.135	150	2	200	1	10	6.6	545	1N5345B
1N5346B	8.645	9.1	9.555	150	2	150	1	7.5	6.9	520	1N5346B
1N5347B	9.5	10	10.5	125	2	125	1	5	7.6	475	1N5347B
1N5348B	10.45	11	11.55	125	2.5	125	1	5	8.4	430	1N5348B
1N5349B	11.4	12	12.6	100	2.5	125	1	2	9.1	395	1N5349B
1N5350B	12.35	13	13.65	100	2.5	100	1	1	9.9	365	1N5350B
1N5351B	13.3	14	14.7	100	2.5	75	1	1	10.6	340	1N5351B
1N5352B	14.25	15	15.75	75	2.5	75	1	1	11.5	315	1N5352B
1N5353B	15.2	16	16.8	75	2.5	75	1	1	12.2	295	1N5353B
1N5354B	16.15	17	17.85	70	2.5	75	1	0.5	12.9	280	1N5354B
1N5355B	17.1	18	18.9	65	2.5	75	1	0.5	13.7	265	1N5355B
1N5356B	18.05	19	19.95	65	3	75	1	0.5	14.4	250	1N5356B
1N5357B	19	20	21	65	3	75	1	0.5	15.2	237	1N5357B
1N5358B	20.9	22	23.1	50	3.5	75	1	0.5	16.7	216	1N5358B
1N5359B	22.8	24	25.2	50	3.5	100	1	0.5	18.2	198	1N5359B
1N5360B	23.75	25	26.25	50	4	110	1	0.5	19	190	1N5360B
1N5361B	25.65	27	28.35	50	5	120	1	0.5	20.6	176	1N5361B
1N5362B	26.6	28	29.4	50	6	130	1	0.5	21.2	170	1N5362B
1N5363B	28.5	30	31.5	40	8	140	1	0.5	22.8	158	1N5363B
1N5364B	31.35	33	34.65	40	10	150	1	0.5	25.1	144	1N5364B
1N5365B	34.2	36	37.8	30	11	160	1	0.5	27.4	132	1N5365B
1N5366B	37.05	39	40.95	30	14	170	1	0.5	29.7	122	1N5366B
1N5367B	40.85	43	45.15	30	20	190	1	0.5	32.7	110	1N5367B
1N5368B	44.65	47	49.35	25	25	210	1	0.5	35.8	100	1N5368B
1N5369B	48.45	51	53.55	25	27	230	1	0.5	38.8	93	1N5369B
1N5370B	53.2	56	58.8	20	35	280	1	0.5	42.6	86	1N5370B
1N5371B	57	60	63	20	40	350	1	0.5	45.5	79	1N5371B
1N5372B	58.9	62	65.1	20	42	400	1	0.5	47.1	76	1N5372B
1N5373B	64.6	68	71.4	20	44	500	1	0.5	51.7	70	1N5373B
1N5374B	71.25	75	78.75	20	45	620	1	0.5	56	63	1N5374B
1N5375B	77.9	82	86.1	15	65	720	1	0.5	62.2	58	1N5375B
1N5376B	82.65	87	91.35	15	75	760	1	0.5	66	54.5	1N5376B
1N5377B	86.45	91	95.55	15	75	760	1	0.5	69.2	52.5	1N5377B
1N5378B	95	100	105	12	90	800	1	0.5	76	47.5	1N5378B
1N5379B	104.5	110	115.5	12	125	1000	1	0.5	83.6	43	1N5379B
1N5380B	114	120	126	10	170	1150	1	0.5	91.2	39.5	1N5380B
1N5381B	123.5	130	136.5	10	190	1250	1	0.5	98.8	36.6	1N5381B

DEVICE CHARACTERISTICS

1N53xxB

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Reverse Leakage Current		Max. DC Zener Current	Marking Code
	VZ @ IZT			IZT@ZZT		ZZK@IZK		IR@VR		IZM	
	Min. V	Nom. V	Max. V	mA	Ω	Ω	mA	uA	V	mA	
1N5382B	133	140	147	8	230	1500	1	0.5	106	34	1N5382B
1N5383B	142.5	150	157.5	8	330	1500	1	0.5	114	31.6	1N5383B
1N5384B	152	160	168	8	350	1650	1	0.5	122	29.4	1N5384B
1N5385B	161.5	170	178.5	8	380	1750	1	0.5	129	28	1N5385B
1N5386B	171	180	189	5	430	1750	1	0.5	137	26.4	1N5386B
1N5387B	180.5	190	199.5	5	450	1850	1	0.5	144	25	1N5387B
1N5388B	190	200	210	5	480	1850	1	0.5	152	23.6	1N5388B

Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC method

DEVICE CHARACTERISTICS

1N53xxB

Fig. 1 - Power Temperature Derating Curve

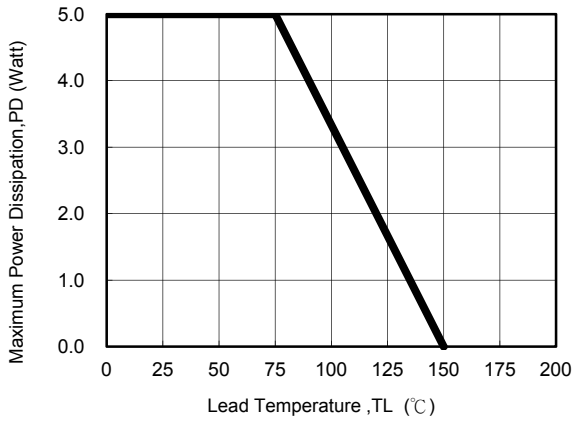


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

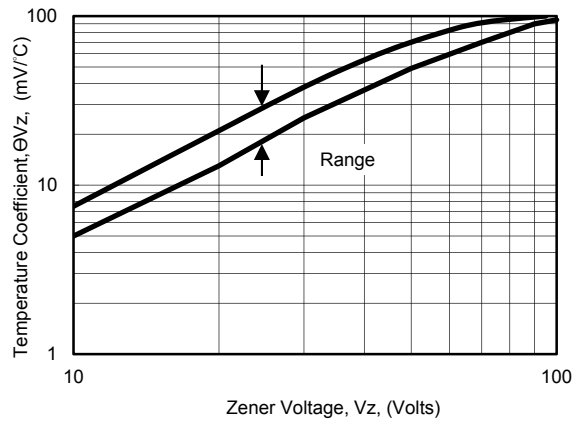


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

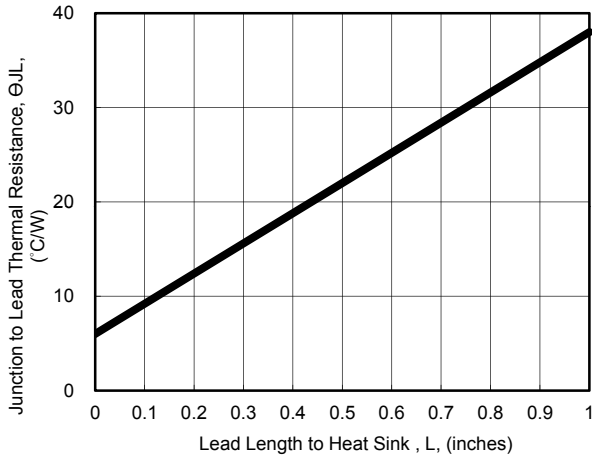


FIG.4 - Maximum Surge Power

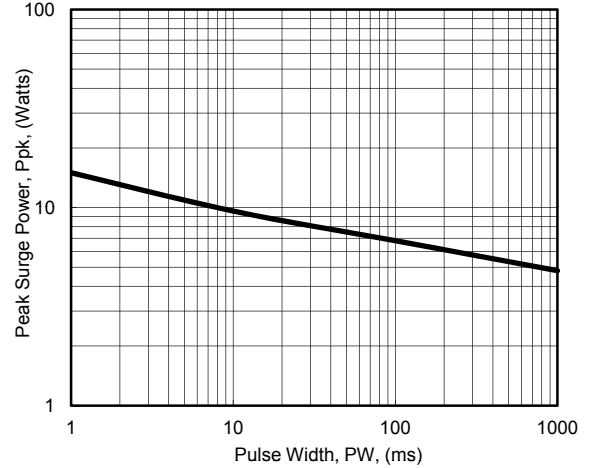


FIG.5 - Typical Thermal Response L, Lead Length=3/8inch

