



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N5341B
THRU
1N5388B

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED JUNCTION ZENER DIODES

VOLTAGE RANGE - 6.2 to 200 Volts

POWER - 5.0 Watts

FEATURES

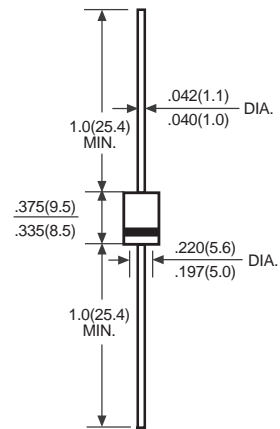
- * Voltage Range: 6.2V to 200V
- * Build-in strain relief
- * Glass passivated junction
- * Low inductance
- * Excellent clamping capability
- * Low profile package

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.1 gram approx.



DO-201AE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Power Dissipation (Notes 1) at Tamb=25°C	P _{tot}	5	W
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Notes 2)	I _{FSM}	15	Amps
Maximum Forward Voltage at I _F =500mA	V _F	1.2	Volts
Operating and Storage Temperature	T _J , T _{stg}	-55 to + 150	°C

Notes: 1. Mounted on 5.0mm² (.013mm thick) land areas.

2. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

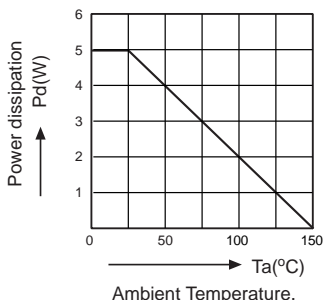


Fig. 1 - Changes in the power dissipation due to the ambient temperature.

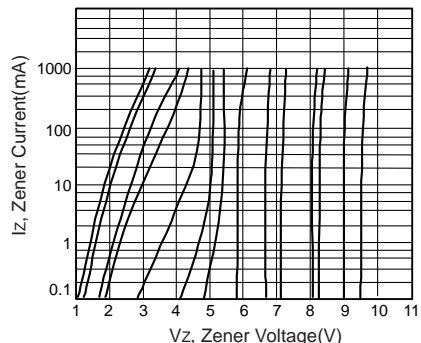


Fig. 2 - V_Z=6.8 Thru 10 Volts

RATING AND CHARACTERISTIC CURVES (1N5341B THRU 1N5388B)

TYPE	Nominal Zener Voltage	Zener Test Current	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current		Maximum DC Zener Current IZM mA
	VZ@IZT	IZT	ZZT@IZT	ZZT@IZK		IR	@VR	
	Volts	mA	Ohms	Ohms		μA	Volts	
1N5341B	6.2	200	1.0	200	1	1.0	3.0	765.0
1N5342B	6.8	175	1.0	200	1	10.0	5.2	700.0
1N5343B	7.5	175	1.5	200	1	10.0	5.7	630.0
1N5344B	8.2	150	1.5	200	1	10.0	6.2	580.0
1N5345B	8.7	150	2.0	200	1	10.0	6.6	545.0
1N5346B	9.1	150	2.0	150	1	7.5	6.9	520.0
1N5347B	10	125	2.0	125	1	5.0	7.6	475.0
1N5348B	11	125	2.5	125	1	5.0	8.4	430.0
1N5349B	12	100	2.5	125	1	2.0	9.1	395.0
1N5350B	13	100	2.5	100	1	1.0	9.9	365.0
1N5352B	15	75	2.5	75	1	1.0	11.5	315.0
1N5353B	16	75	2.5	75	1	1.0	12.2	295.0
1N5355B	18	65	2.5	75	1	0.5	13.7	265.0
1N5357B	20	65	3.0	75	1	0.5	15.2	237.0
1N5358B	22	50	3.5	75	1	0.5	16.7	216.0
1N5359B	24	50	3.5	100	1	0.5	18.2	198.0
1N5361B	27	50	5.0	120	1	0.5	20.6	176.0
1N5363B	30	40	8.0	140	1	0.5	22.8	158.0
1N5364B	33	40	10	150	1	0.5	25.1	144.0
1N5365B	36	30	11	160	1	0.5	27.4	132.0
1N5366B	39	30	14	170	1	0.5	29.7	122.0
1N5367B	43	30	20	190	1	0.5	32.7	110.0
1N5368B	47	25	25	210	1	0.5	35.8	100.0
1N5369B	51	25	27	230	1	0.5	38.8	93.0
1N5370B	56	20	35	280	1	0.5	42.6	86.0
1N5372B	62	20	42	400	1	0.5	47.1	76.0
1N5373B	68	20	44	500	1	0.5	51.7	70.0
1N5374B	75	20	45	620	1	0.5	56.0	63.0
1N5375B	82	15	65	720	1	0.5	62.2	58.0
1N5377B	91	15	75	760	1	0.5	69.2	52.5
1N5378B	100	12	90	800	1	0.5	76.0	47.5
1N5379B	110	12	125	1000	1	0.5	83.6	43.0
1N5380B	120	10	170	1150	1	0.5	91.2	39.5
1N5381B	130	10	190	1250	1	0.5	98.8	36.6
1N5383B	150	8	330	1500	1	0.5	114.0	31.6
1N5384B	160	8	350	1650	1	0.5	122.0	29.4
1N5386B	180	5	430	1750	1	0.5	137.0	26.4
1N5388B	200	5	480	1850	1	0.5	152.0	23.6

NOTE: Standard Zener Voltage Tolerance $\pm 5\%$

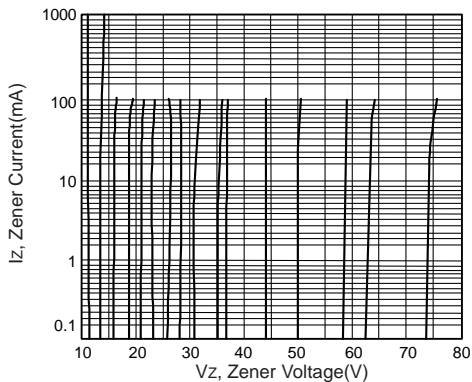


Fig. 3 - Vz=11 Thru 75 Volts

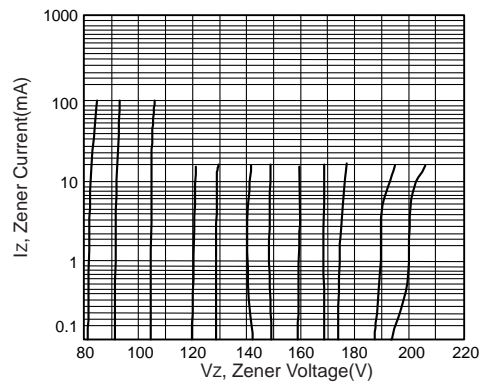


Fig. 4 - Vz=82 Thru 200 Volts

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