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*

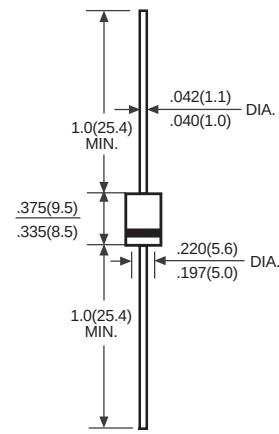
FEATURES

* 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



Dimensions in inches(millimeters)

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	Ptot	5	W
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Notes 2)	IFSM	15	Amps
Maximum Forward Voltage at IF=500mA	VF	1.2	Volts
Operating and Storage Temperature	TJ,Tstg	-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.

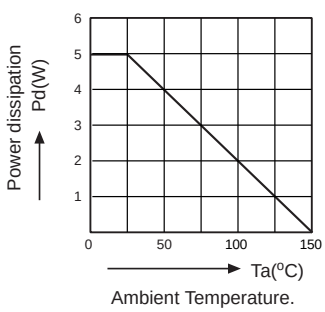


Fig. 1 - Changes in the power dissipation due to the ambient temperature.

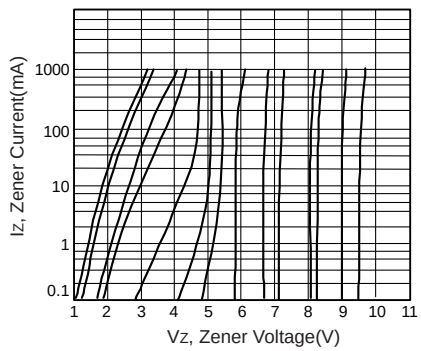


Fig. 2 - VZ=6.8 Thru 10 Volts

RATING AND CHARACTERISTIC CURVES (1N5341B THRU 1N5388B)

TYPE	Nominal Zener Voltage	Zener Test Current	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current	
	VZ@IZT	IZT	ZZT@IZT	ZZT@IZK		IR	@VR
	Volts	mA	Ohms	Ohms	mA	μA	Volts
1N5341B	6.2	200	1.0	200	1	1.0	3.0
1N5342B	6.8	175	1.0	200	1	150	5.2
1N5343B	7.5	175	1.5	200	1	150	5.7
1N5344B	8.2	150	1.5	200	1	150	6.2
1N5345B	8.7	150	2.0	200	1	150	6.6
1N5346B	9.1	150	2.0	150	1	150	6.9
1N5347B	10	125	2.0	150	1	150	7.6
1N5348B	11	125	2.5	125	1	5	8.4
1N5349B	12	100	2.5	125	1	2	9.1
1N5350B	13	100	2.5	100	1	1	9.9
1N5352B	15	75	2.5	75	1	1	11.4
1N5353B	16	75	2.5	75	1	1	12.2
1N5355B	18	65	2.5	75	1	0.5	13.7
1N5357B	20	65	3.0	75	1	0.5	15.2
1N5358B	22	50	3.5	75	1	0.5	16.7
1N5359B	24	50	3.5	100	1	0.5	18.2
1N5361B	27	50	5.0	120	1	0.5	20.6
1N5363B	30	40	8.0	140	1	0.5	22.5
1N5364B	33	40	10	150	1	0.5	25.1
1N5365B	36	30	11	160	1	0.5	27.4
1N5366B	39	30	14	170	1	0.5	29.71
1N5367B	43	30	20	190	1	0.5	32.7
1N5368B	47	25	25	210	1	0.5	35.87
1N5369B	51	25	27	230	1	0.5	38.8
1N5370B	56	20	35	280	1	0.5	42.6
1N5372B	62	20	42	400	1	0.5	47.1
1N5373B	68	20	44	500	1	0.5	51.7
1N5374B	75	20	45	620	1	0.5	56.0
1N5375B	82	15	65	720	1	0.5	62.2
1N5377B	91	15	75	760	1	0.5	69.2
1N5378B	100	12	90	800	1	0.5	76.0
1N5379B	110	12	125	1000	1	0.5	83.6
1N5380B	120	10	170	1150	1	0.5	91.2
1N5381B	130	10	190	1250	1	0.5	98.8
1N5383B	150	8	330	1500	1	0.5	114.0
1N5384B	160	8	350	1650	1	0.5	121.6
1N5386B	180	5	430	1750	1	0.5	136.8
1N5388B	200	5	480	1850	1	0.5	152.0

NOTE: Standard Zener Voltage Tolerance ± 5%

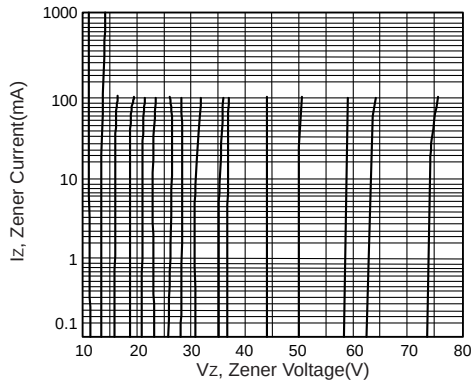


Fig. 3 - Vz=11 Thru 75 Volts

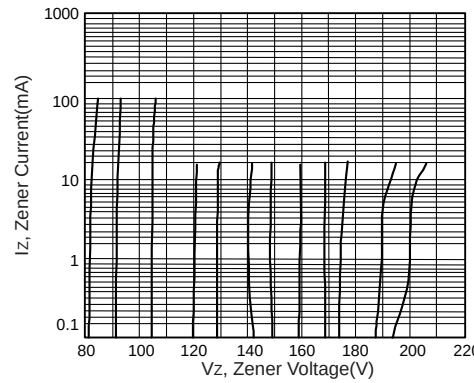


Fig. 4 - Vz=82 Thru 200 Volts