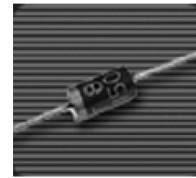


## Features

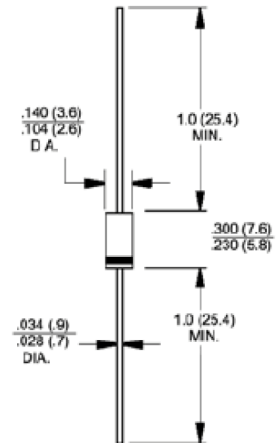
- ◆ power dissipation:max,3.0W
- ◆ For use in stabilizing and clipping circuits with high power rating
- ◆ Low leakage current
- ◆ Moisture sensitivity: level 1, per J-STD-020
- ◆ Solder dip 260 °C, 10 s



**DO-204AC (DO-15)**

## Mechanical Data

- ◆ Case:JEDEC DO-204AC(DO-15) molded plastic
- ◆ Epoxy: UL 94V-0 flame retardant
- ◆ Lead: MIL-STD-202E method 208C guaranteed
- ◆ Mounting position: Any
- ◆ Weight: 0.014ounce, 0.39gram



**Dimensions in inches and (millimeters)**

## Maximum Ratings

(Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Zener current		See Next Table	
Maximum Steady State Power Dissipation @ $T_c = 75^\circ\text{C}$	$P_D$	3.0	W
Maximum Steady State Power Dissipation @ $T_A = 25^\circ\text{C}$	$P_D$	550	mW
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150	°C

## Electrical Characteristics

(Ta=25°C unless otherwise noted)

Type number	Nominal zener voltage at I <sub>ZT</sub> V <sub>Z</sub> (Volts) <sup>(1)</sup>	Test current I <sub>ZT</sub> (mA)	Maximum zener impedance <sup>(2)</sup>			Maximum reverse leakage current		Maximum regulator current <sup>(3)</sup> at T <sub>A</sub> =50°C I (mA)
			Z <sub>T</sub> at I <sub>ZT</sub>	Z (Ω)	At I (mA)	I (uA)	at V (Volts)	
1N5925B	10	37.5	4.5	500	0.25	2.5	8	300
1N5926B	11	34.1	5.5	550	0.25	0.5	8.4	272
1N5927B	12	31.2	6.5	550	0.25	0.5	9.1	250
1N5928B	13	28.8	7	550	0.25	0.5	9.9	230
1N5929B	15	25	9	600	0.25	0.5	11.4	200
1N5930B	16	23.4	10	600	0.25	0.5	12.2	186
1N5931B	18	20.8	12	650	0.25	0.5	13.7	166
1N5932B	20	18.7	14	650	0.25	0.5	15.2	150
1N5933B	22	17	17.5	650	0.25	0.5	16.7	156
1N5934B	24	15.6	19	700	0.25	0.5	18.2	124
1N5935B	27	13.9	23	700	0.25	0.5	20.6	110
1N5936B	30	12.5	26	750	0.25	0.5	22.8	100
1N5937B	33	11.4	33	800	0.25	0.5	25.1	90
1N5938B	36	10.4	38	850	0.25	0.5	27.4	82
1N5939B	39	9.6	45	900	0.25	0.5	29.7	76
1N5940B	43	8.7	53	950	0.25	0.5	32.7	68
1N5941B	47	8	67	1000	0.25	0.5	35.8	62
1N5942B	51	7.3	70	1100	0.25	0.5	38.8	58
1N5943B	56	6.7	86	1300	0.25	0.5	42.6	52
1N5944B	62	6	100	1500	0.25	0.5	47.1	48
1N5945B	68	5.5	120	1700	0.25	0.5	51.7	44
1N5946B	75	5	140	2000	0.25	1	56	40
1N5947B	82	4.6	160	2500	0.25	1	62.2	36
1N5948B	91	4.1	200	3000	0.25	1	69.2	32
1N5949B	100	3.7	250	3100	0.25	1	76	30
1N5950B	110	3.4	300	4000	0.25	1	83.6	26
1N5951B	120	3.1	380	4500	0.25	1	91.2	24
1N5952B	130	2.9	450	5000	0.25	1	98.8	22
1N5953B	150	2.5	600	6000	0.25	1	114	20
1N5954B	160	2.3	700	6500	0.25	1	121.6	18
1N5955B	180	2.1	900	7000	0.25	1	136.8	16
1N5956B	200	1.9	1200	8000	0.25	1	152	14

Notes: (1). Measured under thermal equilibrium and DC test conditions , Standard voltage tolerance is 10%,suffix A ±5%

(2).The Zener impedance is derived from the 1KHZ AC voltage which results when an AC current having an RMS value equal to 10%of the Zener current (IZT or IZK) is superimposed on IZT or IZK. Zener impedance is measure at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units

(3).Valid provided that electrodes at a distance of 10 mm from case are kept at ambient temperature

## Ratings and Characteristics curves

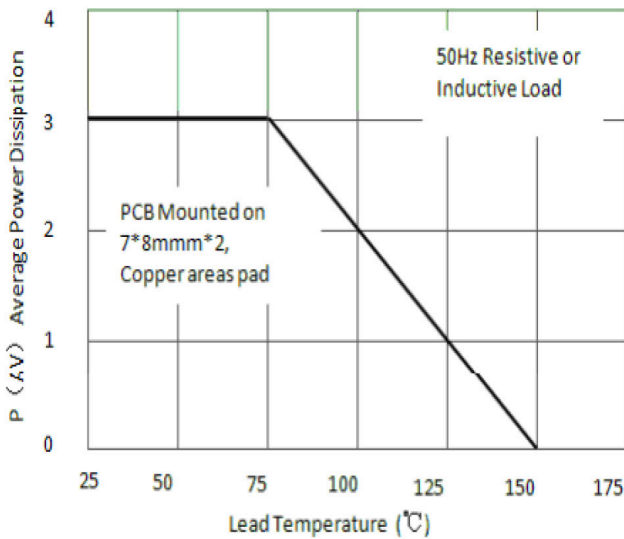


Fig.1 Maximum Continuous Power Dissipation

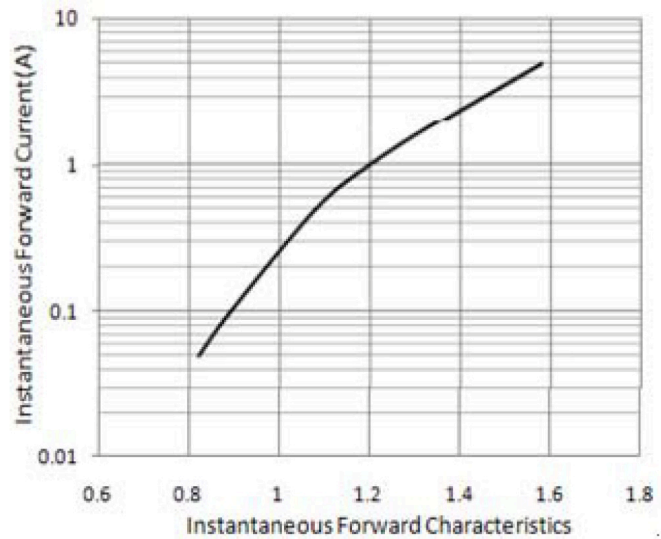


Fig. 2 Typical Instantaneous Forward Characteristics

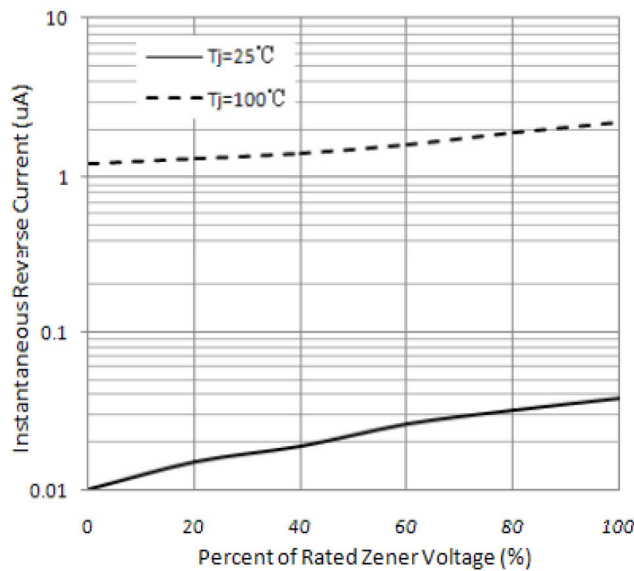


Fig. 3 Typical Reverse Characteristics

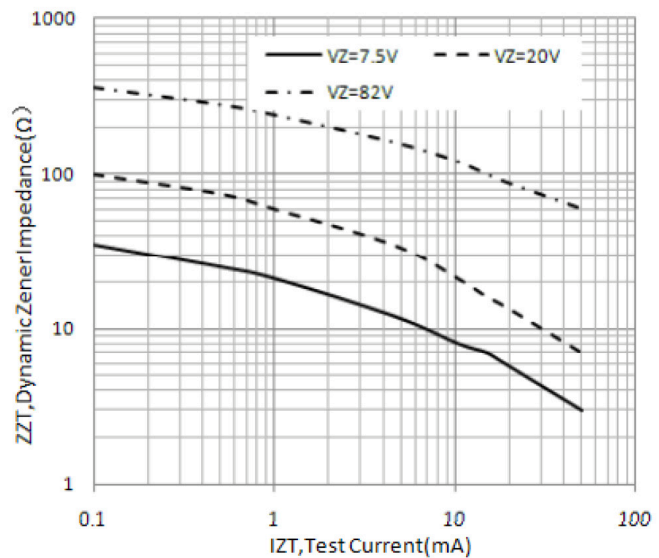


Fig. 4 Typical Zener Impedance