

50W Zener Diodes

Features

- Glass passivated junction
- Good clamping ability
- Available in Normal and Reverse polarity
- Metric and UNF thread type

Mechanical Characteristics

- Hermetically sealed DO-5 outline
- Polarity: Indicated by direction of Zener symbol
- External surfaces corrosion resistant & terminal Solderable
- Weight: 16 grams
- Torque Setting: 3.5 Nm

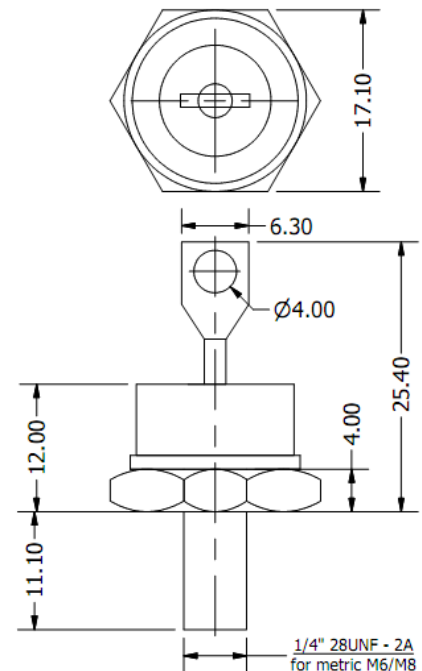
Electrical Data

- DC Power Dissipation: **50 Watts**
- Voltage Range 6.8 – 200 Volts
- Operating temperature -65°C to +175°C
- Derating: 0.5 W/°C over 75°C
- Forward Voltage @ 10A: 1.5 Volts



DO-203AB (DO-5)

Stud Anode Normal
Stud Cathode Reverse ("R" suffix)



ALL DIMENSIONS IN MM

50W Zener Diodes

Electrical Characteristics (T _c = 25°C unless otherwise specified)								
Type number	Nominal Zener Voltage V _Z @I _{ZT} (Volts)	Zener Test Current I _{ZT} (mA)	Max Zener Impedance		Max DC Zener Current I _{ZM} (mA)	Typical Temp. Coeff. a _{vz} (%/°C)	Max Reverse Current	
			Z _{ZT} @I _{ZT} (Ohms)	Z _{ZK} @5mA(I _{ZK}) (Ohms)			I _R (µA)	V _R (Volts)
1N3305A	6.8	1850	0.20	70	6600	0.040	300	4.5
1N3306A	7.5	1700	0.30	70	5900	0.045	125	5.0
1N3307A	8.2	1500	0.40	70	5200	0.048	50	5.4
1N3308A	9.1	1370	0.50	70	4800	0.051	25	6.1
1N3309A	10.0	1200	0.60	80	4300	0.055	25	6.7
1N3310A	11.0	1100	0.80	80	3900	0.060	10	8.4
1N3311A	12.0	1000	1.00	80	3800	0.065	10	9.1
1N3312A	13.0	960	1.10	80	3300	0.065	10	9.9
1N3313A	14.0	890	1.20	80	3000	0.070	10	11.4
1N3314A	15.0	830	1.40	80	2800	0.070	10	11.4
1N3315A	16.0	780	1.60	80	2650	0.070	10	12.2
1N3316A	17.0	740	1.80	80	2500	0.075	10	13.0
1N3317A	18.0	700	2.00	80	2300	0.075	10	13.7
1N3318A	19.0	660	2.20	80	2200	0.075	10	13.7
1N3319A	20.0	630	2.40	80	2100	0.075	10	15.2
1N3320A	22.0	570	2.50	80	1900	0.080	10	16.7
1N3321A	24.0	520	2.60	80	1750	0.080	10	18.2
1N3322A	25.0	500	2.70	90	1550	0.080	10	18.2
1N3323A	27.0	460	2.80	90	1500	0.085	10	20.6
1N3324A	30.0	420	3.00	90	1400	0.085	10	22.8
1N3325A	33.0	380	3.20	90	1300	0.085	10	25.1
1N3326A	36.0	350	3.50	90	1150	0.085	10	27.4
1N3327A	39.0	320	4.00	90	1050	0.090	10	29.7
1N3328A	43.0	290	4.50	90	975	0.090	10	32.7
1N3329A	45.0	280	4.50	100	930	0.090	10	32.7
1N3330A	47.0	270	5.00	100	880	0.090	10	35.8
1N3331A	50.0	250	5.00	100	830	0.090	10	36.0
1N3332A	51.0	245	5.20	100	810	0.090	10	38.8
1N3333A	52.0	240	5.50	100	790	0.090	10	42.6
1N3334A	56.0	220	6.00	110	740	0.090	10	42.6
1N3335A	62.0	200	7.00	120	660	0.090	10	47.1
1N3336A	68.0	180	8.00	140	600	0.090	10	51.7
1N3337A	75.0	170	9.00	150	540	0.090	10	56.0
1N3338A	82.0	150	11.00	160	490	0.090	10	62.2
1N3339A	91.0	140	15.00	180	420	0.090	10	69.2
1N3340A	100.0	120	20.00	200	400	0.090	10	76.0
1N3341A	105.0	120	25.00	210	380	0.095	10	83.0
1N3342A	110.0	110	30.00	220	365	0.095	10	83.0
1N3343A	120.0	100	40.00	240	335	0.095	10	91.2
1N3344A	130.0	95	50.00	275	310	0.095	10	99.8
1N3345A	140.0	90	60.00	325	290	0.095	10	114.0
1N3346A	150.0	85	75.00	400	270	0.095	10	114.0
1N3347A	160.0	80	80.00	450	250	0.095	10	121.6
1N3348A	175.0	70	85.00	500	230	0.095	10	121.6
1N3349A	180.0	68	90.00	525	220	0.095	10	136.8
1N3350A	200.0	65	100.0	600	200	0.100	10	152.0

- Zener impedance is derived from 60Hz AC voltage which results when AC current RMS value (which equals 10% of the DC zener current) is superimposed on I_Z
 - I_{ZM} values are derived for a ±5% V_Z tolerance
- Standard voltage tolerances are ±5% (B suffix), ±10% (A suffix) & ±20% (no suffix)**