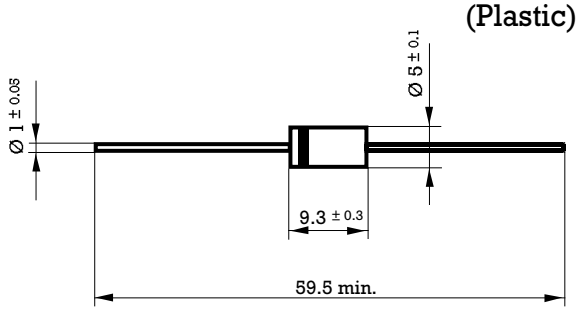
5 W Glass Passivated Zener Diode

Dimensions in mm. DO-201AE (Plastic)



Mounting instructions

1. Min. distance from body to soldering point, 4 mm.
2. Max. solder temperature, 350°C.
3. Max. soldering time, 3.5 sec.
4. Do not bend lead at a point closer than 3 mm. to the body.

Voltage 8.2 to 200 V.

Power 5.0 W

HYPERECTIFIER®

Standard Voltage Tolerance is ± 5%

- **Glass passivated junction**
- The plastic material carries U/L recognition 94 V-0
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

Maximum Ratings, according to IEC publication No. 134

P_{tot}	Power dissipation at Tamb = 75 °C	5 W
P_{ZSM}	Non repetitive peak zener dissipation (t = 10 ms)	200 W
T_j	Operating temperature range	– 65 to + 175 °C
T_{stg}	Storage temperature range	– 65 to + 175 °C

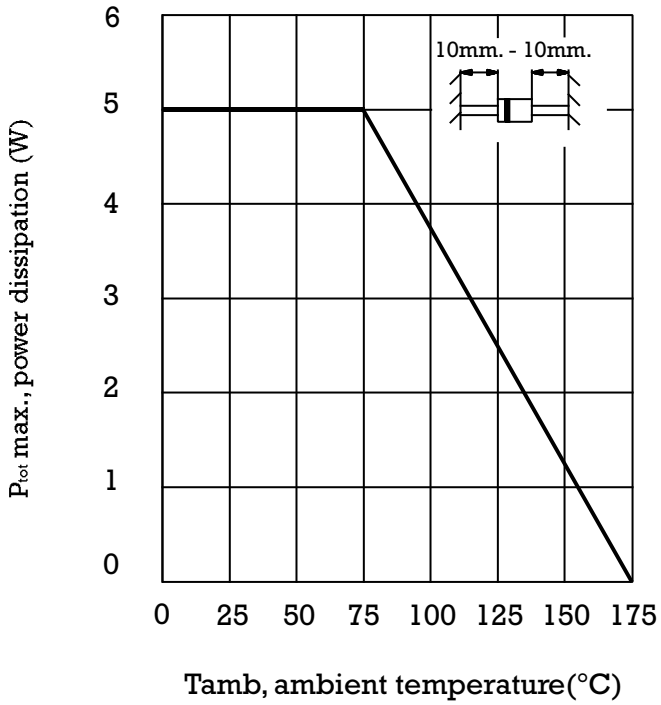
Electrical Characteristics at Tamb = 25°C

V_F	Max. forward voltage drop at I_F = 3.0 A	1.2 V
R_{thj-a}	Max. thermal resistance at: 10 mm. lead length	20° C/W

Type	Nominal Zener Voltage V_Z at I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance Z_{ZT} at I_{ZT}	Typical Temperature Coefficient	Maximum Reverse Leakage Current I_R	at V_R	Maximum Regulator Current I_{ZM}
	(V)	(mA)	(Ω)	(%/°C)	(µA)	(V)	(mA)
BZV58C8V2	7.7 - 8.7	150	1.5	+ 0.048	10	3	570
BZV58C9V1	8.5 - 9.6	150	2	+ 0.051	10	6.6	520
BZV58C10	9.4 - 10.6	125	2	+ 0.055	10	7.6	470
BZV58C11	10.4 - 11.6	125	2.5	+ 0.060	5	8.3	430
BZV58C12	11.4 - 12.7	100	2.5	+ 0.065	2	9.1	390
BZV58C13	12.4 - 14.1	100	2.5	+ 0.065	1	9.9	350
BZV58C15	13.8 - 15.6	75	2.5	+ 0.070	1	11.4	320
BZV58C16	15.3 - 17.1	75	2.5	+ 0.070	1	12.2	290
BZV58C18	16.8 - 19.1	65	2.5	+ 0.075	1	13.7	260
BZV58C20	18.8 - 21.2	65	3	+ 0.075	1	15.2	235
BZV58C22	20.8 - 23.3	50	3.5	+ 0.080	1	16.7	215
BZV58C24	22.8 -25.6	50	3.5	+ 0.080	1	18.2	195
BZV58C27	25.1 - 28.9	50	5	+ 0.085	1	20.5	170
BZV58C30	28 - 32	40	8	+ 0.085	1	22.8	155
BZV58C33	31 - 35	40	10	+ 0.085	1	25	140
BZV58C36	34 - 38	30	11	+ 0.085	1	27.4	130
BZV58C39	37 - 41	30	14	+ 0.090	1	29.6	120
BZV58C43	40 - 46	30	20	+ 0.090	1	32.7	110
BZV58C47	44 - 50	25	25	+ 0.090	1	35.7	100
BZV58C51	48 - 54	25	27	+ 0.090	1	38.8	92
BZV58C56	52 - 60	20	35	+ 0.090	1	42.5	83
BZV58C62	58 - 66	20	42	+ 0.090	1	47.1	75
BZV58C68	64 - 72	20	44	+ 0.090	1	51.7	69
BZV58C75	70 - 79	20	45	+ 0.090	1	57	63
BZV58C82	77 - 87	15	65	+ 0.090	1	62.4	57
BZV58C91	85 - 96	15	75	+ 0.090	1	69.2	52
BZV58C100	94 - 106	12	90	+ 0.090	1	76	47
BZV58C110	104 - 116	12	125	+ 0.095	1	83.5	43
BZV58C120	114 - 127	10	170	+ 0.095	1	91.2	39
BZV58C130	124 - 141	10	190	+ 0.095	1	98.8	35
BZV58C150	138 - 156	8	330	+ 0.095	1	114	32
BZV58C160	153 - 171	8	350	+ 0.095	1	122	29
BZV58C180	168 - 191	5	430	+ 0.095	1	137	26
BZV58C200	188 - 212	5	480	+ 0.100	1	152	23

Characteristic Curves

MAXIMUM CONTINUOUS POWER DISSIPATION



THERMAL RESISTANCE