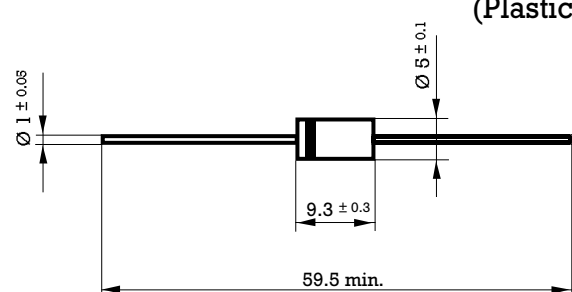



## 5 W Glass Passivated Zener Diode

<p>Dimensions in mm.</p>  <p>DO-201AE (Plastic)</p> <p>Mounting instructions</p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350°C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 3 mm. to the body.</li> </ol>	<p>Voltage 8.2 to 200 V.</p> <p>Power 5.0 W</p>  <p>Standard Voltage Tolerance is <math>\pm 5\%</math></p> <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul>
---	---

### Maximum Ratings, according to IEC publication No. 134

$P_{\text{tot}}$	Power dissipation at $T_{\text{amb}} = 75^\circ\text{C}$	5 W
$P_{\text{ZSM}}$	Non repetitive peak zener dissipation ( $t = 10 \text{ ms}$ )	200 W
$T_j$	Operating temperature range	- 65 to + 175 °C
$T_{\text{stg}}$	Storage temperature range	- 65 to + 175 °C

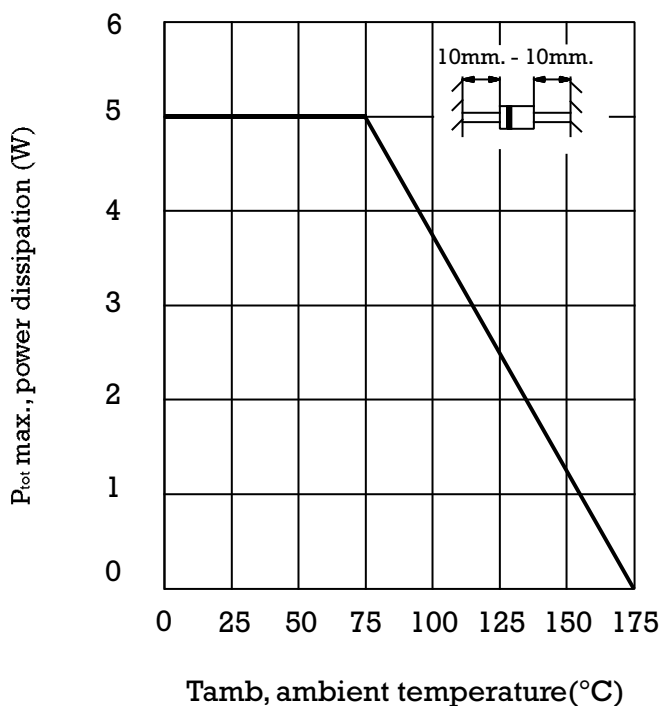
### Electrical Characteristics at $T_{\text{amb}} = 25^\circ\text{C}$

$V_F$	Max. forward voltage drop at $I_F = 3.0 \text{ A}$	1.2 V
$R_{\text{thj-a}}$	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 at $V_R$		Maximum Regulator Current $I_{ZM}$
	(V)	(mA)	( $\Omega$ )	(%/°C)	( $\mu$ A)	(V)	(mA)
<b>BZV58C8V2</b>	7.7 - 8.7	150	1.5	+ 0.048	10	3	570
<b>BZV58C9V1</b>	8.5 - 9.6	150	2	+ 0.051	10	6.6	520
<b>BZV58C10</b>	9.4 - 10.6	125	2	+ 0.055	10	7.6	470
<b>BZV58C11</b>	10.4 - 11.6	125	2.5	+ 0.060	5	8.3	430
<b>BZV58C12</b>	11.4 - 12.7	100	2.5	+ 0.065	2	9.1	390
<b>BZV58C13</b>	12.4 - 14.1	100	2.5	+ 0.065	1	9.9	350
<b>BZV58C15</b>	13.8 - 15.6	75	2.5	+ 0.070	1	11.4	320
<b>BZV58C16</b>	15.3 - 17.1	75	2.5	+ 0.070	1	12.2	290
<b>BZV58C18</b>	16.8 - 19.1	65	2.5	+ 0.075	1	13.7	260
<b>BZV58C20</b>	18.8 - 21.2	65	3	+ 0.075	1	15.2	235
<b>BZV58C22</b>	20.8 - 23.3	50	3.5	+ 0.080	1	16.7	215
<b>BZV58C24</b>	22.8 - 25.6	50	3.5	+ 0.080	1	18.2	195
<b>BZV58C27</b>	25.1 - 28.9	50	5	+ 0.085	1	20.5	170
<b>BZV58C30</b>	28 - 32	40	8	+ 0.085	1	22.8	155
<b>BZV58C33</b>	31 - 35	40	10	+ 0.085	1	25	140
<b>BZV58C36</b>	34 - 38	30	11	+ 0.085	1	27.4	130
<b>BZV58C39</b>	37 - 41	30	14	+ 0.090	1	29.6	120
<b>BZV58C43</b>	40 - 46	30	20	+ 0.090	1	32.7	110
<b>BZV58C47</b>	44 - 50	25	25	+ 0.090	1	35.7	100
<b>BZV58C51</b>	48 - 54	25	27	+ 0.090	1	38.8	92
<b>BZV58C56</b>	52 - 60	20	35	+ 0.090	1	42.5	83
<b>BZV58C62</b>	58 - 66	20	42	+ 0.090	1	47.1	75
<b>BZV58C68</b>	64 - 72	20	44	+ 0.090	1	51.7	69
<b>BZV58C75</b>	70 - 79	20	45	+ 0.090	1	57	63
<b>BZV58C82</b>	77 - 87	15	65	+ 0.090	1	62.4	57
<b>BZV58C91</b>	85 - 96	15	75	+ 0.090	1	69.2	52
<b>BZV58C100</b>	94 - 106	12	90	+ 0.090	1	76	47
<b>BZV58C110</b>	104 - 116	12	125	+ 0.095	1	83.5	43
<b>BZV58C120</b>	114 - 127	10	170	+ 0.095	1	91.2	39
<b>BZV58C130</b>	124 - 141	10	190	+ 0.095	1	98.8	35
<b>BZV58C150</b>	138 - 156	8	330	+ 0.095	1	114	32
<b>BZV58C160</b>	153 - 171	8	350	+ 0.095	1	122	29
<b>BZV58C180</b>	168 - 191	5	430	+ 0.095	1	137	26
<b>BZV58C200</b>	188 - 212	5	480	+ 0.100	1	152	23

# Characteristic Curves

MAXIMUM CONTINUOUS POWER DISSIPATION



THERMAL RESISTANCE

