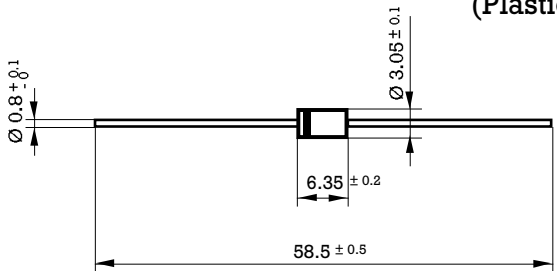



2 W Glass Passivated Zener Diode

| | |
|--|--|
| <p>Dimensions in mm.</p> <p style="text-align: right;">DO-15 (Plastic)</p>  | <p>Voltage 6.2 to 200 V.</p> <p>Power 2.0 W</p>  |
| <p>Mounting instructions</p> <ol style="list-style-type: none"> 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 2 mm. to the body. | <ul style="list-style-type: none"> • 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 $T_{amb} = 25\text{ °C}$ | 2 W |
| P_{ZSM} | Non repetitive peak zener dissipation ($t = 10\text{ ms}$) | 60 W |
| T_j | Operating temperature range | - 65 to + 175 °C |
| T_{stg} | Storage temperature range | - 65 to + 175 °C |

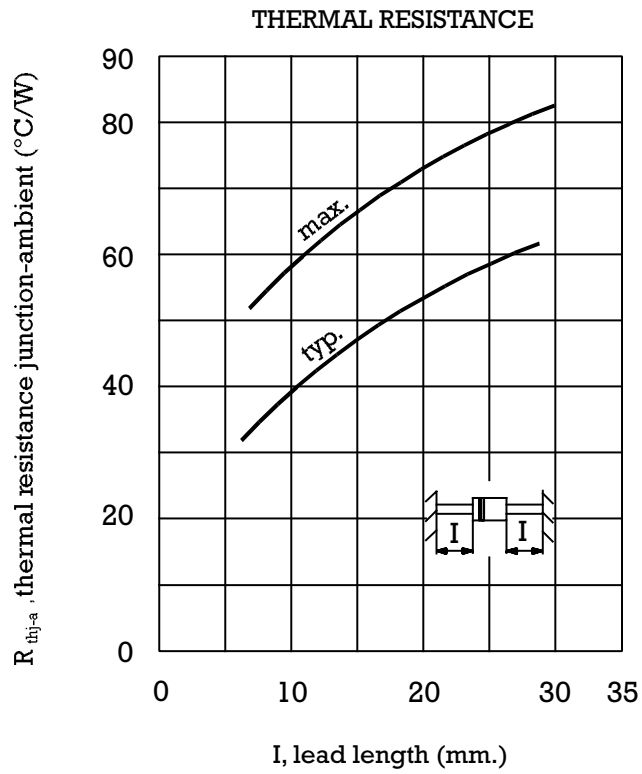
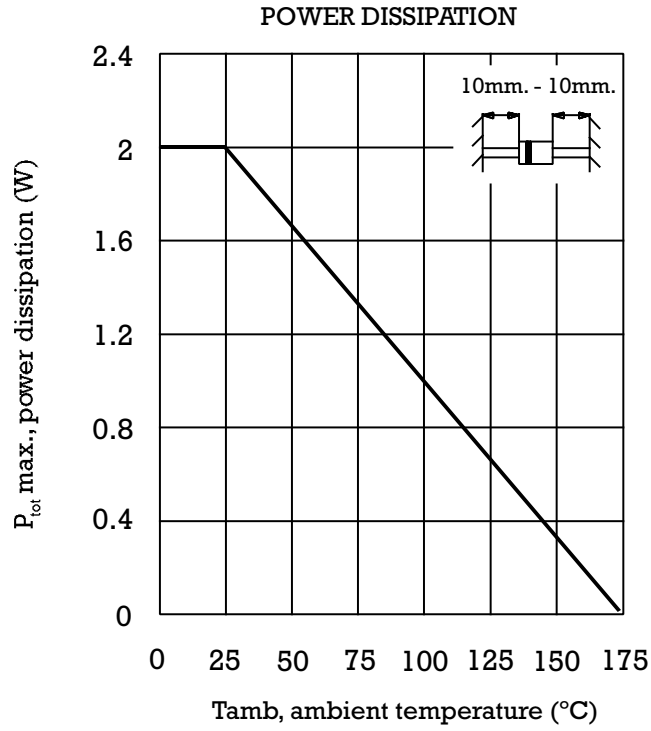
Electrical Characteristics at $T_{amb} = 25\text{ °C}$

| | | |
|-------------|---|---------|
| R_{thj-a} | Max. thermal resistance at: 10 mm. lead length | 60 °C/W |
|-------------|---|---------|

| Type | Zener (1) Voltage Range V_Z at I_{ZT} | Maximum Zener Impedance Z_{ZT} at I_{ZT} | Test Current I_{ZT} | Temp coef. of Zener Volt. | Min Reverse Voltage at $I_R = 1 \mu A$ V_R | Max Regulator Current at 45 °C I_{ZM} |
|---------|--|---|-----------------------------|------------------------------------|---|--|
| | (V) | () | (mA) | (% / °C) | (V) | (mA) |
| ZY6V2GP | 5.8-6.6 | 2 | 100 | +0.025 | 1.5 | 245 |
| ZY6V8GP | 6.4-7.2 | 2 | 100 | +0.035 | 2 | 220 |
| ZY7V5GP | 7.0-7.9 | 2 | 100 | +0.035 | 2 | 200 |
| ZY8V2GP | 7.7-8.7 | 2 | 100 | +0.055 | 3.5 | 180 |
| ZY9V1GP | 8.5-9.6 | 4 | 50 | +0.055 | 6.9 | 165 |
| ZY10GP | 9.4-10.6 | 4 | 50 | +0.070 | 7.5 | 145 |
| ZY11GP | 10.4-11.6 | 7 | 50 | +0.075 | 8.3 | 135 |
| ZY12GP | 11.4-12.7 | 7 | 50 | +0.075 | 9.1 | 120 |
| ZY13GP | 12.4-14.1 | 10 | 50 | +0.075 | 9.9 | 110 |
| ZY15GP | 13.8-15.8 | 10 | 50 | +0.075 | 11.4 | 98 |
| ZY16GP | 15.3-17.1 | 15 | 25 | +0.085 | 12.2 | 90 |
| ZY18GP | 16.8-19.1 | 15 | 25 | +0.085 | 13.7 | 80 |
| ZY20GP | 18.8-21.2 | 15 | 25 | +0.085 | 15.2 | 72 |
| ZY22GP | 20.8-23.3 | 15 | 25 | +0.085 | 16.7 | 66 |
| ZY24GP | 22.8-25.6 | 15 | 25 | +0.085 | 18.2 | 60 |
| ZY27GP | 25.1-28.9 | 15 | 25 | +0.085 | 20.5 | 53 |
| ZY30GP | 28-32 | 15 | 25 | +0.085 | 22.8 | 48 |
| ZY33GP | 31-35 | 15 | 25 | +0.085 | 25 | 44 |
| ZY36GP | 34-38 | 40 | 10 | +0.085 | 27.4 | 40 |
| ZY39GP | 37-41 | 40 | 10 | +0.085 | 29.6 | 37 |
| ZY43GP | 40-46 | 45 | 10 | +0.095 | 32.7 | 33 |
| ZY47GP | 44-50 | 45 | 10 | +0.095 | 35.7 | 30 |
| ZY51GP | 48-54 | 60 | 10 | +0.095 | 38.8 | 27 |
| ZY56GP | 52-60 | 60 | 10 | +0.095 | 42.5 | 25 |
| ZY62GP | 58-66 | 80 | 10 | +0.105 | 47.1 | 21 |
| ZY68GP | 64-72 | 80 | 10 | +0.105 | 51.7 | 20 |
| ZY75GP | 70-79 | 100 | 10 | +0.105 | 57 | 18 |
| ZY82GP | 77-88 | 100 | 10 | +0.105 | 62.4 | 16 |
| ZY91GP | 85-96 | 200 | 5 | +0.110 | 69.2 | 15 |
| ZY100GP | 94-106 | 200 | 5 | +0.110 | 76 | 13 |
| ZY110GP | 104-116 | 250 | 5 | +0.110 | 83.5 | 12 |
| ZY120GP | 114-127 | 250 | 5 | +0.110 | 91.2 | 11 |
| ZY130GP | 124-141 | 300 | 5 | +0.110 | 98.2 | 10 |
| ZY150GP | 138-156 | 300 | 5 | +0.110 | 114 | 9 |
| ZY160GP | 153-171 | 350 | 5 | +0.110 | 122 | 8.5 |
| ZY180GP | 168-191 | 350 | 5 | +0.110 | 137 | 8.0 |
| ZY200GP | 188-212 | 350 | 5 | +0.110 | 152 | 7.5 |

(1) Tested with pulses.
Pulse test: $t_p = 50 \text{ ms}$; $\delta < 2\%$

Characteristic Curves



BREAKDOWN CHARACTERISTICS

