

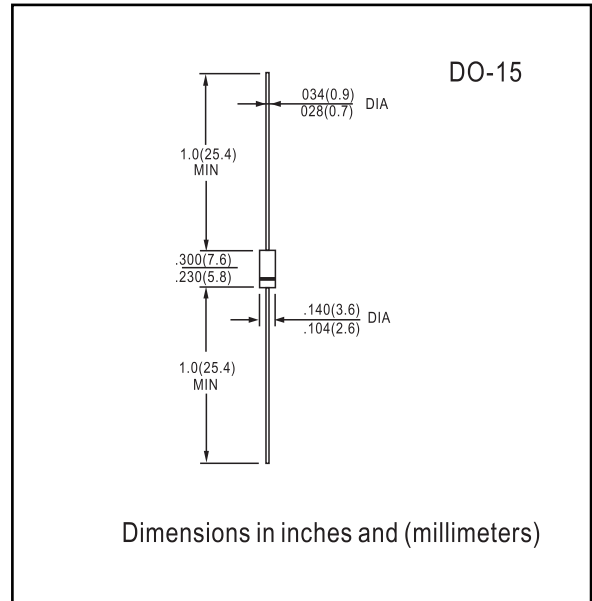


**FEATURES**

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

**Mechanical Data**

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



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

**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 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 |
|-------------|--|---------|



**TAYCHIPST**

**Glass Passivated Zener Diode**

**ZY6V2GP THRU ZY200GP**

**5.8V-188V**

**2W**

| Type    | Zener (1)<br>Voltage<br>Range<br>$V_Z$ at $I_{ZT}$ | Maximum<br>Zener<br>Impedance<br>$Z_{ZT}$ at $I_{ZT}$ | Test<br>Current<br>$I_{ZT}$ | Temp<br>coef. of<br>Zener<br>Volt. | Min Reverse<br>Voltage<br>at $I_R = 1 \mu A$<br>$V_R$ | Max<br>Regulator<br>Current at 45 °C<br>$I_{ZM}$ |
|---------|--|---|-----------------------------|------------------------------------|---|--|
|         | (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 ms; < 2%