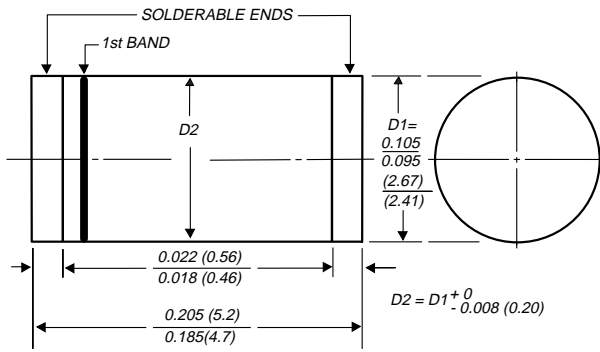


# ZGL41-100 THRU ZGL41-200A

**SURFACE MOUNT GLASS PASSIVATED ZENER**  
*Zener Voltage - 100 to 200 Volts      Steady State Power - 1.0 Watt*

**DO-213AB**



Dimensions in inches and (millimeters)

## FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mount applications
- ◆ Glass passivated junction
- ◆ Low Zener impedance
- ◆ Low regulation factor
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals



## MECHANICAL DATA

**Case:** JEDEC DO-213AB molded plastic body over passivated junction

**Terminals:** Solder plated solderable per MIL-STD-750, Method 2026

**Polarity:** Red band denotes Zener diode and positive end (cathode)

**Mounting Position:** Any

**Weight:** 0.0046 ounce, 0.116 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

**OPERATING JUNCTION AND STORAGE TEMPERATURE RANGE: T<sub>J</sub>, T<sub>STG</sub>: -55°C to +150°C**

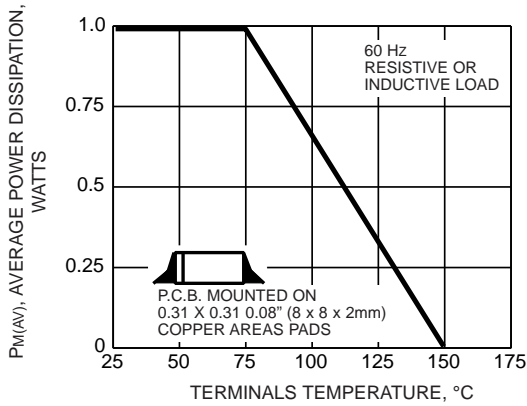
| TYPE      | NOMINAL ZENER VOLTAGE at I <sub>ZT</sub> (NOTE 1) (V <sub>Z</sub> ) (Volts) | TEST CURRENT (I <sub>ZT</sub> ) (mA) | MAXIMUM ZENER DYNAMIC IMPEDANCE           |   |                      | MAXIMUM DC REVERSE LEAKAGE CURRENT at V <sub>R</sub> |                           | MAXIMUM SURGE CURRENT (NOTE 2) (I <sub>RM</sub> ) (mAdc) | MAXIMUM INSTANTANEOUS FORWARD VOLTAGE at 200mA (V <sub>F</sub> ) (VOLTS) |
|-----------|---|--------------------------------------|---|---|----------------------|--|---------------------------|--|--|
|           |   |                                      | Z <sub>ZT</sub> at I <sub>ZT</sub> (Ohms) | Z <sub>ZK</sub> at I <sub>ZK</sub> (Ohms) | I <sub>ZK</sub> (mA) | (I <sub>R</sub> ) (μA)                               | (V <sub>R</sub> ) (Volts) |  |  |
| ZGL41-100 | 100   | 3.7                                  | 250                                       | 3100                                      | 0.25                 | 1.0  | 76.0                      | 10.0   | 1.5  |
| ZGL41-110 | 110   | 3.4                                  | 300                                       | 4000                                      | 0.25                 | 1.0  | 83.6                      | 9.1  | 1.5  |
| ZGL41-120 | 120   | 3.1                                  | 380                                       | 4500                                      | 0.25                 | 1.0  | 91.2                      | 8.3  | 1.5  |
| ZGL41-130 | 130   | 2.9                                  | 450                                       | 5000                                      | 0.25                 | 1.0  | 98.8                      | 7.7  | 1.5  |
| ZGL41-140 | 140   | 2.7                                  | 525                                       | 5500                                      | 0.25                 | 1.0  | 106.4                     | 7.1  | 1.5  |
| ZGL41-150 | 150   | 2.5                                  | 600                                       | 6000                                      | 0.25                 | 1.0  | 114.0                     | 6.7  | 1.5  |
| ZGL41-160 | 160   | 2.3                                  | 700                                       | 6500                                      | 0.25                 | 1.0  | 121.6                     | 6.3  | 1.5  |
| ZGL41-170 | 170   | 2.2                                  | 800                                       | 6750                                      | 0.25                 | 1.0  | 129.2                     | 5.9  | 1.5  |
| ZGL41-180 | 180   | 2.1                                  | 900                                       | 7000                                      | 0.25                 | 1.0  | 136.9                     | 5.6  | 1.5  |
| ZGL41-190 | 190   | 2.0                                  | 1050                                      | 7500                                      | 0.25                 | 1.0  | 144.4                     | 5.3  | 1.5  |
| ZGL41-200 | 200   | 1.9                                  | 1200                                      | 8000                                      | 0.25                 | 1.0  | 152.0                     | 5.0  | 1.5  |

**NOTES:**

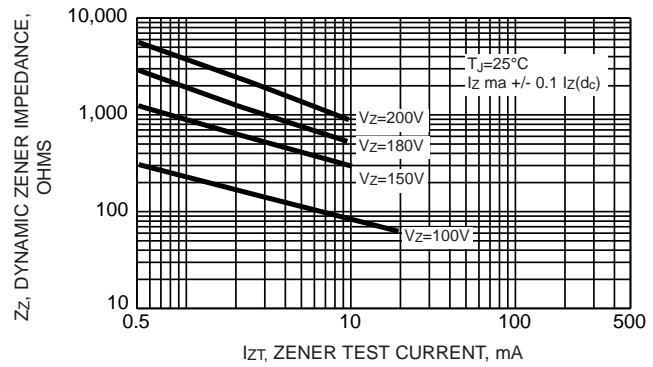
- (1) Standard voltage tolerance is ± 10%, Suffix A = ± 5%
- (2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I<sub>ZT</sub> per JEDEC Method
- (3) Maximum steady state power dissipation is 1.0 watt at T<sub>T</sub>=75°C

# RATINGS AND CHARACTERISTIC CURVES ZGL41-100 THRU ZGL41-200A

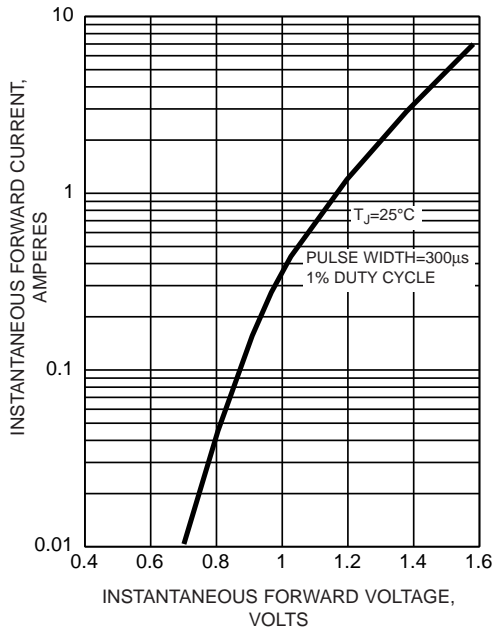
**FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION**



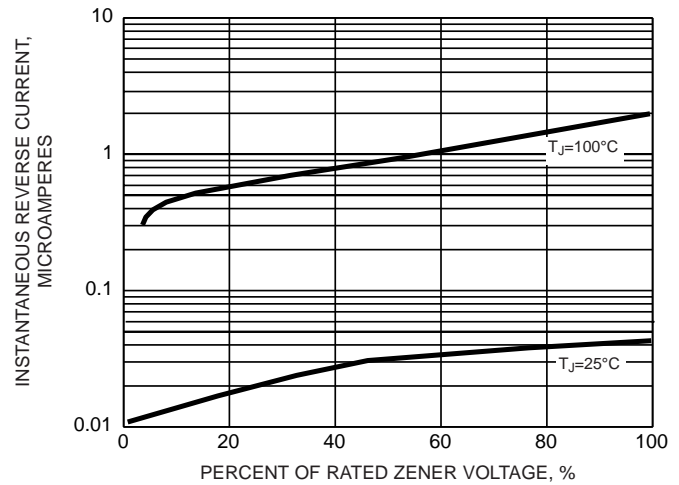
**FIG. 2 - TYPICAL ZENER IMPEDANCE**



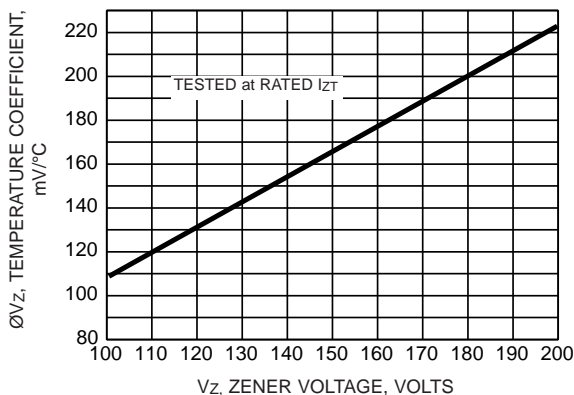
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL TEMPERATURE COEFFICIENTS**



**FIG. 6 - TYPICAL ZENER VOLTAGE**

