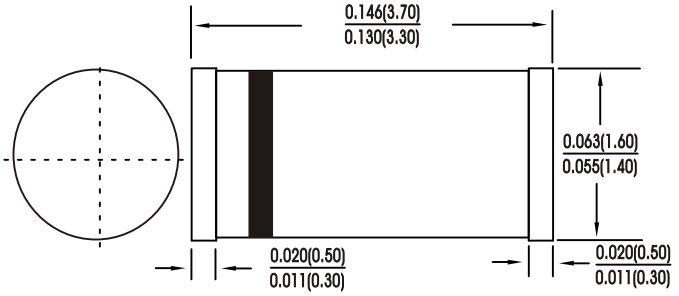
# GLZ2.0(A)(B)(D) THRU GLZ56(A)(B)(C)

## SURFACE MOUNT ZENER DIODES

## FEATURES:

- Planar Die construction
- 500mV Power Dissipationie construction
- Ieally Suited for Automated Assembly Processes

## MINI-MELF SOD-80/DO-213AA




## MECHANICAL DATA

Case: MINI MELF Molded Glass
Terminals: Solderable per MIL-STD-202E,Method 208
Polarity: See Diagram Below
Approx Weigh: 0.008 grams
Mounting Position: Any

Dimensions in inches and (millimeters)

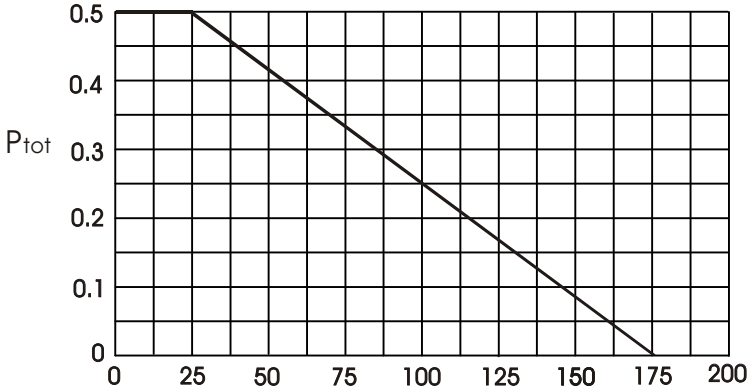
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ℃ ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

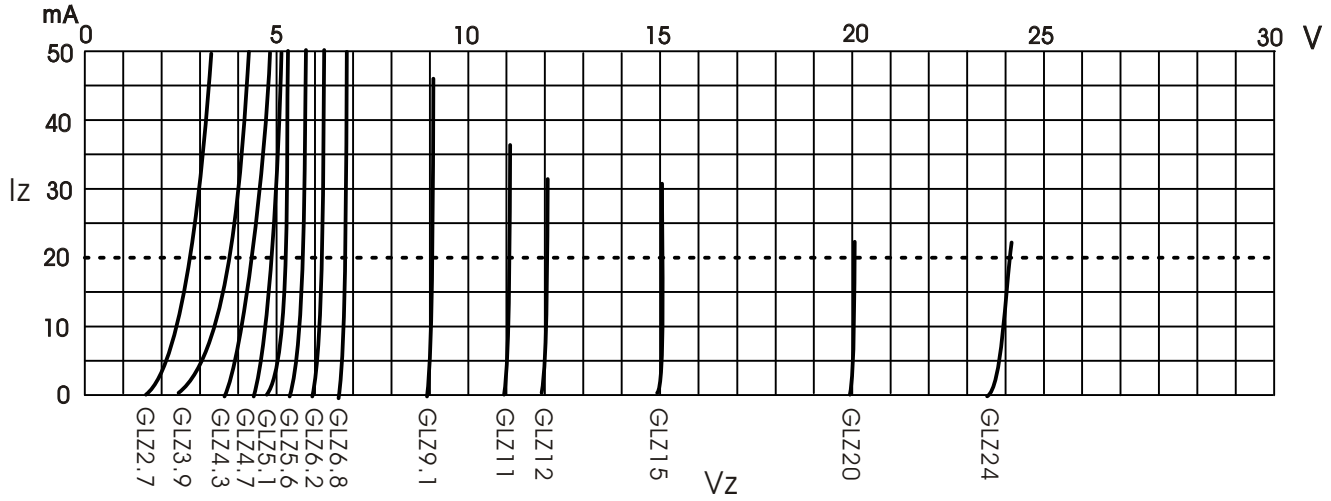
| Characteristic | Symbol | Value | Units |
|---|---|---|---|
| Power Dissipation at Tamb=25 ℃ | Ptot | 0.5[1)] | W |
| Z-current | Iz | Pv/Vz | mA |
| Tremal Resistance Junction to Ambient Air | RthJ-A | 0.3[1)] | K/mW |
| Maximum instantaneous forward voltage drop IF=10 mADC | $V_F$ | 0.9 | Volts |
| Junction temperature | $T_J$ | 175 | ℃ |
| Storage temperature range | Tstg | -65 to+175 | ℃ |

1) Valid provided that leads are kept at ambient temperature at a distance of 10mm from case

CHANGE IN THE POWER DISSIPATION DUE TO THE AMBIENT TEMPERATURE




BREAKDOWN CHARACTERISTICS



## SURFACE MOUNT ZENER DIODES GLZ2.0(A)(B)(C) THRU GLZ56(A)(B)(C)

| Device Type | CLASS | Zener Voltage Vz at Izt Volts | | Test Current IzT | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Marking code | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ZzT at IzT | ZzK at IzK | IzK | IR | VR | | |
| | | MIN. | MAX. | mA | Ω | Ω | mA | μA | Volts | | |
| GLZ 2.0 | A | 1.880 | 2.100 | 20 | 140 | 2000 | 1.0 | 120 | 0.5 | 2A0 | |
| | B | 2.020 | 2.200 | | | | | | | 2B0 | |
| GLZ 2.2 | A | 2.120 | 2.300 | 20 | 120 | 2000 | 1.0 | 120 | 0.7 | 2A2 | |
| | B | 2.220 | 2.410 | | | | | | | 2B2 | |
| GLZ 2.4 | A | 2.330 | 2.520 | 20 | 100 | 2000 | 1.0 | 120 | 1.0 | 2A4 | |
| | B | 2.430 | 2.630 | | | | | | | 2B4 | |
| GLZ 2.7 | A | 2.540 | 2.750 | 20 | 100 | 1000 | 1.0 | 120 | 1.0 | 2A7 | |
| | B | 2.690 | 2.910 | | | | | | | 2B7 | |
| GLZ 3.0 | A | 2.850 | 3.070 | 20 | 80 | 1000 | 1.0 | 50 | 1.0 | 3A0 | |
| | B | 3.010 | 3.220 | | | | | | | 3B0 | |
| GLZ 3.3 | A | 3.160 | 3.380 | 20 | 70 | 1000 | 1.0 | 30 | 1.0 | 3A3 | |
| | B | 3.320 | 3.530 | | | | | | | 3B3 | |
| GLZ 3.6 | A | 3.455 | 3.695 | 20 | 60 | 1000 | 1.0 | 10 | 1.0 | 3A6 | |
| | B | 3.600 | 3.845 | | | | | | | 3B6 | |
| GLZ 3.9 | A | 3.740 | 4.010 | 20 | 50 | 1000 | 1.0 | 5 | 1.0 | 3A9 | |
| | B | 3.890 | 4.160 | | | | | | | 3B9 | |
| GLZ 4.3 | A | 4.040 | 4.290 | 20 | 40 | 1000 | 1.0 | 5 | 1.0 | 4A3 | |
| | B | 4.170 | 4.430 | | | | | | | 4B3 | |
| | C | 4.300 | 4.570 | | | | | | | 4C3 | |
| GLZ 4.7 | A | 4.440 | 4.680 | 20 | 25 | 900 | 1.0 | 5 | 1.0 | 4A7 | |
| | B | 4.550 | 4.800 | | | | | | | 4B7 | |
| | C | 4.680 | 4.930 | | | | | | | 4C7 | |
| GLZ 5.1 | A | 4.810 | 5.070 | 20 | 20 | 800 | 1.0 | 5 | 1.5 | 5A1 | |
| | B | 4.940 | 5.200 | | | | | | | 5B1 | |
| | C | 5.090 | 5.370 | | | | | | | 5C1 | |
| GLZ 5.6 | A | 5.280 | 5.550 | 20 | 13 | 500 | 1.0 | 5 | 2.5 | 5A6 | |
| | B | 5.450 | 5.730 | | | | | | | 5B6 | |
| | C | 5.610 | 5.910 | | | | | | | 5C6 | |
| GLZ 6.2 | A | 5.780 | 6.090 | 20 | 10 | 300 | 1.0 | 5 | 3.0 | 6A2 | |
| | B | 5.960 | 6.270 | | | | | | | 6B2 | |
| | C | 6.120 | 6.440 | | | | | | | 6C2 | |
| GLZ 6.8 | A | 6.290 | 6.630 | 20 | 8 | 150 | 0.5 | 2.0 | 3.5 | 6A8 | |
| | B | 6.490 | 6.830 | | | | | | | 6B8 | |
| | C | 6.660 | 7.010 | | | | | | | 6C8 | |
| GLZ 7.5 | A | 6.850 | 7.220 | 20 | 8 | 120 | 0.5 | 0.5 | 4.0 | 7A5 | |
| | B | 7.070 | 7.450 | | | | | | | 7B5 | |
| | C | 7.290 | 7.670 | | | | | | | 7C5 | |
| GLZ 8.2 | A | 7.530 | 7.920 | 20 | 8 | 120 | 0.5 | 0.5 | 5.0 | 8A2 | |
| | B | 7.780 | 8.190 | | | | | | | 8B2 | |
| | C | 8.030 | 8.450 | | | | | | | 8C2 | |
| GLZ 9.1 | A | 8.290 | 8.730 | 20 | 8 | 120 | 0.5 | 0.5 | 6.0 | 9A1 | |
| | B | 8.570 | 9.010 | | | | | | | 9B1 | |
| | C | 8.830 | 9.300 | | | | | | | 9C1 | |
| GLZ 10 | A | 9.120 | 9.590 | 20 | 8 | 120 | 0.5 | 0.2 | 7.0 | 10A | |
| | B | 9.410 | 9.900 | | | | | | | 10B | |
| | C | 9.700 | 10.20 | | | | | | | 10C | |
| | D | 9.940 | 10.44 | | | | | | | 10D | |
| GLZ 11 | A | 10.18 | 10.71 | 10 | 10 | 120 | 0.5 | 0.2 | 8.0 | 11A | |
| | B | 10.50 | 11.05 | | | | | | | 11B | |
| | C | 10.82 | 11.38 | | | | | | | 11C | |
| GLZ 12 | A | 11.13 | 11.71 | 10 | 12 | 110 | 0.5 | 0.2 | 9.0 | 12A | |
| | B | 11.44 | 12.03 | | | | | | | 12B | |
| | C | 11.74 | 12.35 | | | | | | | 12C | |
| GLZ 13 | A | 12.11 | 12.75 | 10 | 14 | 110 | 0.5 | 0.2 | 1.0 | 13A | |
| | B | 12.55 | 13.21 | | | | | | | 13B | |
| | C | 12.99 | 13.66 | | | | | | | 13C | |

## SURFACE MOUNT ZENER DIODES GLZ2.0(A)(B)(C) THRU GLZ56(A)(B)(C)

| Device Type | CLASS | Zener Voltage Vz at Izt Volts | | Test Current IzT | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Marking code | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ZzT at IzT | ZzK at IzK | IzK | IR | VR | | |
| | | MIN. | MAX. | mA | Ω | Ω | mA | μA | Volts | | |
| GLZ 15 | A | 13.44 | 14.13 | 10 | 14 | 110 | 0.5 | 0.2 | 11 | 15A | |
| | B | 13.89 | 14.62 | | | | | | | 15B | |
| | C | 14.35 | 15.09 | | | | | | | 15C | |
| GLZ 16 | A | 14.80 | 15.57 | 10 | 16 | 150 | 0.5 | 0.2 | 12 | 16A | |
| | B | 15.25 | 16.04 | | | | | | | 16B | |
| | C | 15.69 | 16.51 | | | | | | | 16C | |
| GLZ 18 | A | 16.22 | 17.06 | 10 | 18 | 150 | 0.5 | 0.2 | 13 | 18A | |
| | B | 16.82 | 17.70 | | | | | | | 18B | |
| | C | 17.42 | 18.33 | | | | | | | 18C | |
| GLZ 20 | A | 18.02 | 18.96 | 10 | 23 | 200 | 0.5 | 0.2 | 15 | 20A | |
| | B | 18.63 | 19.59 | | | | | | | 20B | |
| | C | 19.23 | 20.22 | | | | | | | 20C | |
| | D | 19.72 | 20.72 | | | | | | | | |
| GLZ 22 | A | 20.15 | 21.20 | 5 | 28 | 200 | 0.5 | 0.2 | 17 | 22A | |
| | B | 20.64 | 21.71 | | | | | | | 22B | |
| | C | 21.08 | 22.17 | | | | | | | 22C | |
| | D | 21.52 | 22.63 | | | | | | | | |
| GLZ 24 | A | 22.05 | 23.18 | 5 | 30 | 200 | 0.5 | 0.2 | 19 | 24A | |
| | B | 22.61 | 23.77 | | | | | | | 24B | |
| | C | 23.12 | 24.31 | | | | | | | 24C | |
| | D | 23.63 | 24.85 | | | | | | | | |
| GLZ 27 | A | 24.26 | 25.52 | 5 | 35 | 200 | 0.5 | 0.2 | 21 | 27A | |
| | B | 24.97 | 26.26 | | | | | | | 27B | |
| | C | 25.63 | 26.95 | | | | | | | 27C | |
| | D | 26.29 | 27.64 | | | | | | | | |
| GLZ 30 | A | 26.99 | 28.39 | 5 | 45 | 250 | 0.5 | 0.2 | 23 | 30A | |
| | B | 27.70 | 29.13 | | | | | | | 30B | |
| | C | 28.36 | 29.82 | | | | | | | 30C | |
| | D | 29.02 | 30.51 | | | | | | | | |
| GLZ 33 | A | 29.68 | 31.22 | 5 | 55 | 250 | 0.5 | 0.2 | 25 | 33A | |
| | B | 30.32 | 31.88 | | | | | | | 33B | |
| | C | 30.90 | 32.50 | | | | | | | 33C | |
| | D | 31.49 | 33.11 | | | | | | | | |
| GLZ 36 | A | 32.14 | 33.79 | 5 | 75 | 250 | 0.5 | 0.2 | 27 | 36A | |
| | B | 32.79 | 34.49 | | | | | | | 36B | |
| | C | 33.40 | 35.13 | | | | | | | 36C | |
| | D | 34.01 | 35.77 | | | | | | | | |
| GLZ 39 | A | 34.68 | 36.47 | 5 | 85 | 250 | 0.5 | 0.2 | 30 | 39A | |
| | B | 35.36 | 37.19 | | | | | | | 39B | |
| | C | 36.00 | 37.85 | | | | | | | 39C | |
| | D | 36.63 | 38.52 | | | | | | | | |
| GLZ 43 | | 40.00 | 45.00 | 5 | 90 | ---- | ---- | 0.2 | 33 | 43 | |
| GLZ 47 | | 44.00 | 49.00 | 5 | 90 | ---- | ---- | 0.2 | 36 | 47 | |
| GLZ 51 | | 48.00 | 54.00 | 5 | 110 | ---- | ---- | 0.2 | 39 | 51 | |
| GLZ 51 | | 53.00 | 60.00 | 5 | 110 | ---- | ---- | 0.2 | 43 | 56 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |