

Zener diode

RLZ15B

●Applications

Voltage regulation

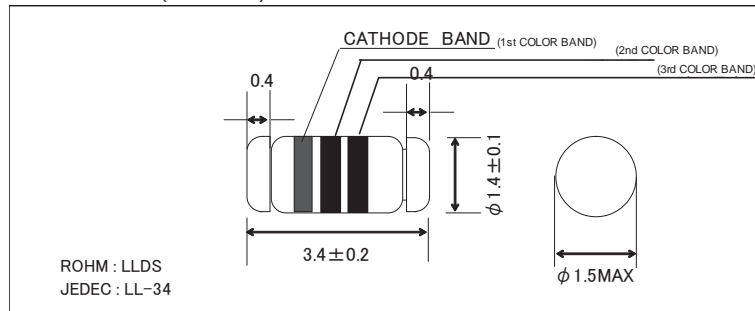
●Features

- 1) Grass sealed envelope. (LLDS)
- 2) High reliability.

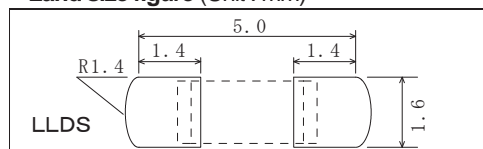
●Construction

Silicon planar

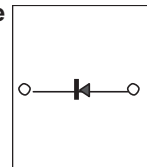
●Dimensions (Unit : mm)



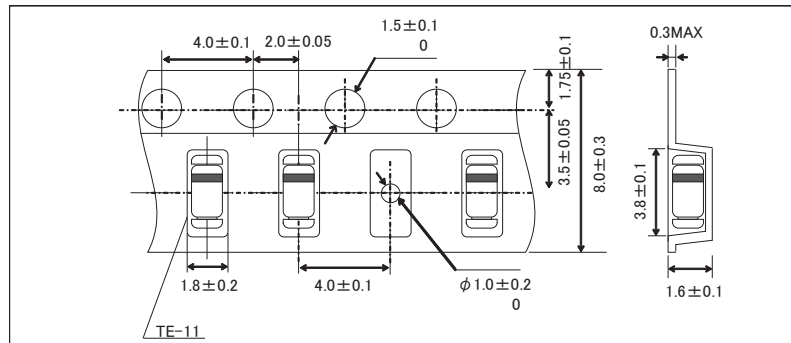
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|----------------------|------------------|-------------|------|
| Power dissipation | P | 500 | mW |
| Junction temperature | T _J | 175 | °C |
| Storage temperature | T _{stg} | -65 to +175 | °C |

Diodes

●Electrical voltage (Ta=25°C)

| TYP. | Symbol | | | | | | | | |
|----------|-----------------------|--------|--------|------------------------------|--------|-------------------------------------|--------|--------------------------|-------|
| | Zener voltage : Vz(V) | | | Operating resistance : Zz(Ω) | | Rising operating resistance : Zz(Ω) | | Reverse current : IR(uA) | |
| | MIN. | MAX. | Iz(mA) | MAX. | Iz(mA) | MAX. | Iz(mA) | MAX. | VR(V) |
| RLZ 3.6B | 3.600 | 3.845 | 20.0 | 60 | 20.0 | 1000 | 1.0 | 10.0 | 1.0 |
| RLZ 3.9B | 3.890 | 4.160 | 20.0 | 50 | 20.0 | 1000 | 1.0 | 5.0 | 1.0 |
| RLZ 4.3B | 4.170 | 4.430 | 20.0 | 40 | 20.0 | 1000 | 1.0 | 5.0 | 1.0 |
| RLZ 4.7B | 4.550 | 4.800 | 20.0 | 25 | 20.0 | 900 | 1.0 | 5.0 | 1.0 |
| RLZ 5.1B | 4.940 | 5.200 | 20.0 | 20 | 20.0 | 800 | 1.0 | 5.0 | 1.5 |
| RLZ 5.6B | 5.450 | 5.730 | 20.0 | 13 | 20.0 | 500 | 1.0 | 5.0 | 2.5 |
| RLZ 6.2B | 5.960 | 6.270 | 20.0 | 10 | 20.0 | 300 | 1.0 | 5.0 | 3.0 |
| RLZ 6.8B | 6.490 | 6.830 | 20.0 | 8 | 20.0 | 150 | 0.5 | 2.0 | 3.5 |
| RLZ 7.5B | 7.070 | 7.450 | 20.0 | 8 | 20.0 | 120 | 0.5 | 0.5 | 4.0 |
| RLZ 8.2B | 7.780 | 8.190 | 20.0 | 8 | 20.0 | 120 | 0.5 | 0.5 | 5.0 |
| RLZ 9.1B | 8.570 | 9.010 | 20.0 | 8 | 20.0 | 120 | 0.5 | 0.5 | 6.0 |
| RLZ 10B | 9.410 | 9.900 | 20.0 | 8 | 20.0 | 120 | 0.5 | 0.2 | 7.0 |
| RLZ 11B | 10.500 | 11.050 | 10.0 | 10 | 10.0 | 120 | 0.5 | 0.2 | 8.0 |
| RLZ 12B | 11.440 | 12.030 | 10.0 | 12 | 10.0 | 110 | 0.5 | 0.2 | 9.0 |
| RLZ 13B | 12.550 | 13.210 | 10.0 | 14 | 10.0 | 110 | 0.5 | 0.2 | 10.0 |
| RLZ 15B | 13.890 | 14.620 | 10.0 | 16 | 10.0 | 110 | 0.5 | 0.2 | 11.0 |
| RLZ 16B | 15.250 | 16.040 | 10.0 | 18 | 10.0 | 150 | 0.5 | 0.2 | 12.0 |
| RLZ 18B | 16.820 | 17.700 | 10.0 | 23 | 10.0 | 150 | 0.5 | 0.2 | 13.0 |
| RLZ 20B | 18.630 | 19.590 | 10.0 | 28 | 10.0 | 200 | 0.5 | 0.2 | 15.0 |
| RLZ 22B | 20.640 | 21.710 | 5.0 | 30 | 5.0 | 200 | 0.5 | 0.2 | 17.0 |
| RLZ 24B | 22.610 | 23.770 | 5.0 | 35 | 5.0 | 200 | 0.5 | 0.2 | 19.0 |
| RLZ 27B | 24.970 | 26.260 | 5.0 | 45 | 5.0 | 250 | 0.5 | 0.2 | 21.0 |
| RLZ 30B | 27.700 | 29.130 | 5.0 | 55 | 5.0 | 250 | 0.5 | 0.2 | 23.0 |
| RLZ 33B | 30.320 | 31.880 | 5.0 | 65 | 5.0 | 250 | 0.5 | 0.2 | 25.0 |
| RLZ 36B | 32.790 | 34.490 | 5.0 | 75 | 5.0 | 250 | 0.5 | 0.2 | 27.0 |
| RLZ 39B | 35.360 | 37.190 | 5.0 | 85 | 5.0 | 250 | 0.5 | 0.2 | 30.0 |

(1) The zener voltage(Vz) is measured 40ms after power is supplied.

(2) The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(Iz)

●Type No.

| TYPE | TYPE NO. | | TYPE | TYPE NO. | |
|----------|----------------|----------------|---------|----------------|----------------|
| | 1st COLOR BAND | 2nd COLOR BAND | | 1st COLOR BAND | 2nd COLOR BAND |
| RLZ 3.6B | 0 | 7 | RLZ 12B | 2 | 0 |
| RLZ 3.9B | 0 | 8 | RLZ 13B | 2 | 1 |
| RLZ 4.3B | 0 | 9 | RLZ 15B | 2 | 2 |
| RLZ 4.7B | 1 | 0 | RLZ 16B | 2 | 3 |
| RLZ 5.1B | 1 | 1 | RLZ 18B | 2 | 4 |
| RLZ 5.6B | 1 | 2 | RLZ 20B | 2 | 5 |
| RLZ 6.2B | 1 | 3 | RLZ 22B | 2 | 6 |
| RLZ 6.8B | 1 | 4 | RLZ 24B | 2 | 7 |
| RLZ 7.5B | 1 | 5 | RLZ 27B | 2 | 8 |
| RLZ 8.2B | 1 | 6 | RLZ 30B | 2 | 9 |
| RLZ 9.1B | 1 | 7 | RLZ 33B | 3 | 0 |
| RLZ 10B | 1 | 8 | RLZ 36B | 3 | 1 |
| RLZ 11B | 1 | 9 | RLZ 39B | 3 | 2 |

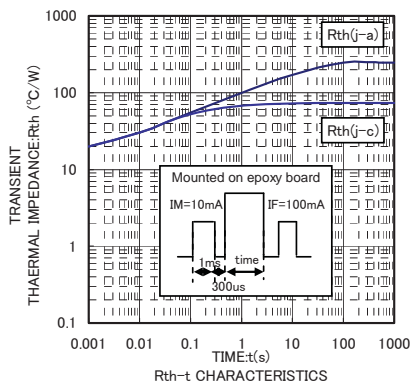
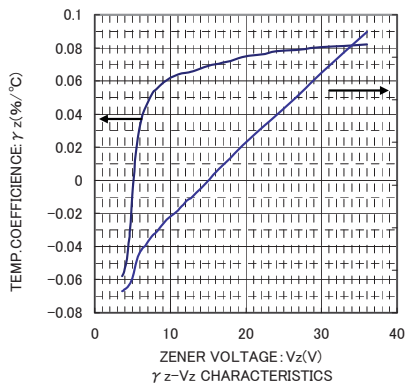
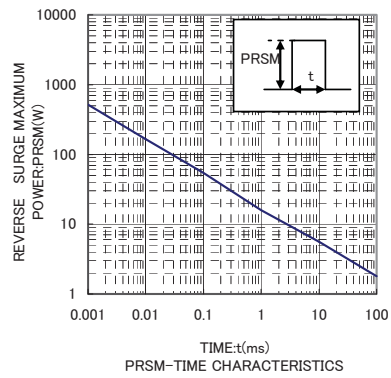
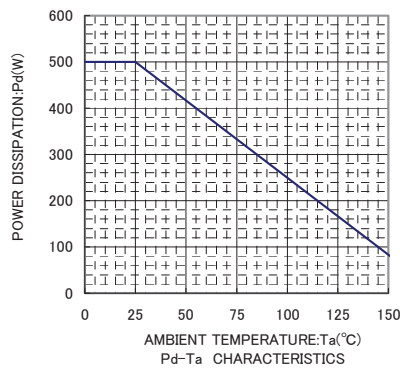
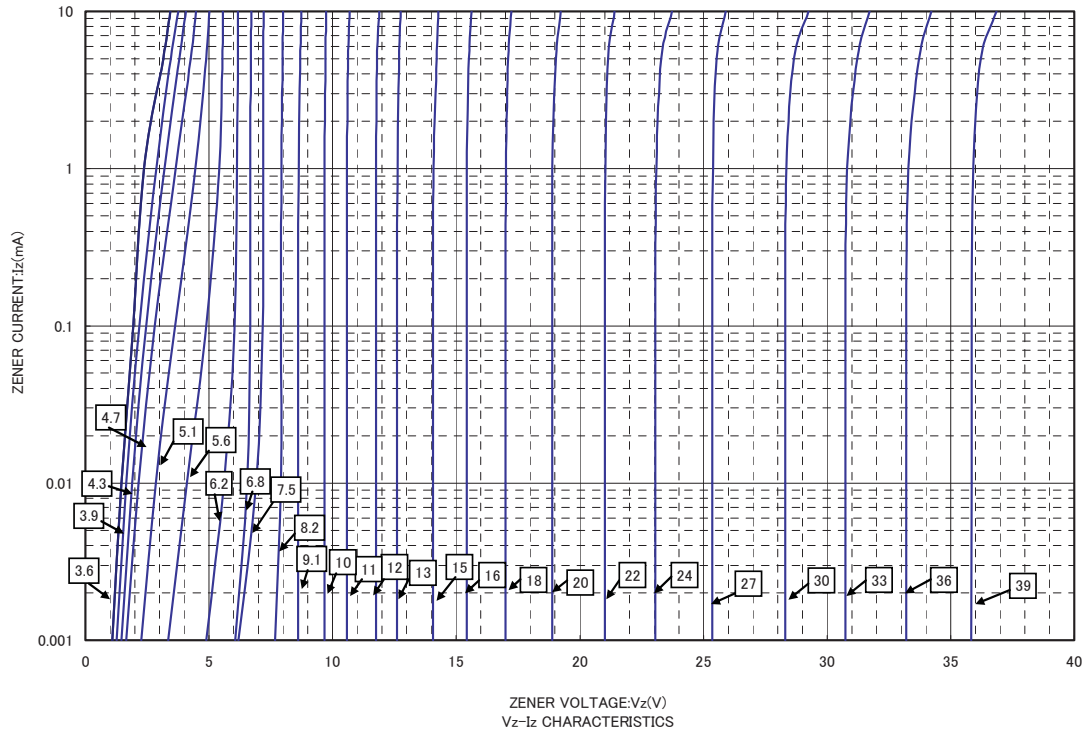
| 1st COLOR BAND | Color |
|----------------|--------|
| 0 | Black |
| 1 | Brown |
| 2 | Red |
| 3 | Orange |

| 2nd COLOR BAND | Color |
|----------------|--------|
| 0 | Black |
| 1 | Brown |
| 2 | Red |
| 3 | Orange |
| 4 | Yellow |
| 5 | Green |
| 6 | Blue |
| 7 | Purple |
| 8 | Gray |
| 9 | White |

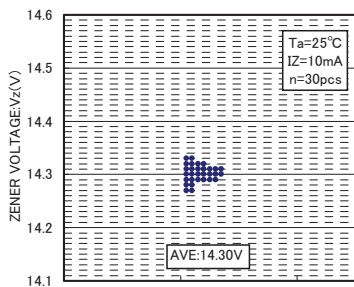
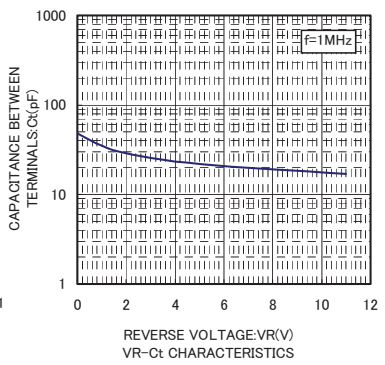
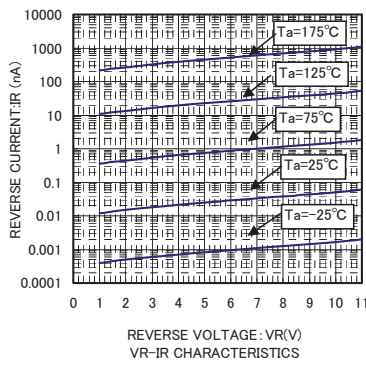
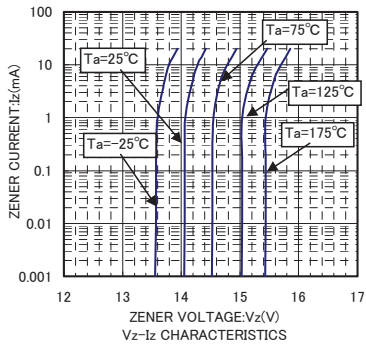
| 3rd COLOR BAND | Color |
|----------------|--------|
| A、E | Yellow |
| B、F | Green |
| C、G | Blue |
| D | White |

Diodes

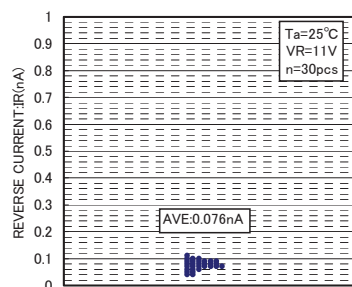
●Electrical characteristics (Ta=25°C)



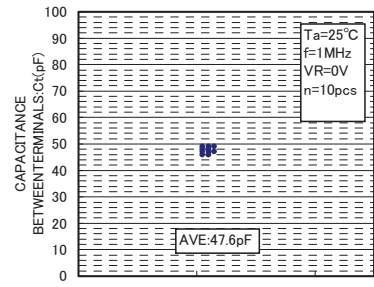
Diodes



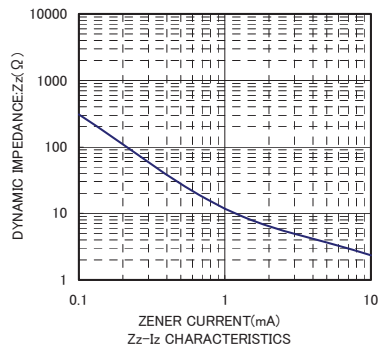
V_Z DISRESION MAP



I_R DISRESION MAP



C_t DISRESION MAP



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