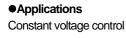
# Zener diode

## TDZ11

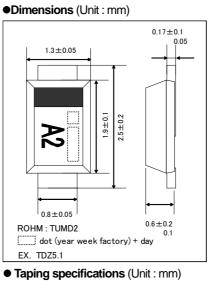


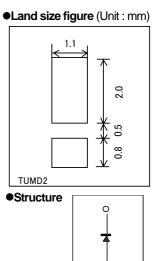
#### Features

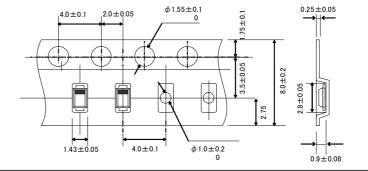
- 1) Small mold type. (TUMD2)
- 2) High reliability.
- 3) Can be mounted automatically, using chip mounter.

#### Construction

Silicon epitaxial planar







#### ●Absolute maximum ratings (Ta=25°C)

| Parameter            | Symbol | Limits     | Unit |
|----------------------|--------|------------|------|
| Power dissipation    | Р      | 500        | mW   |
| Junction temperature | Tj     | 150        | °C   |
| Storage temperature  | Tstg   | -55 to 150 | °C   |
| Operating resistance | Topr   | -55 to 150 | °C   |

#### Diodes

#### ●Electrical characteristics (Ta=25°C)

|         |       | Symbol                |        |      |                             |  |  |
|---------|-------|-----------------------|--------|------|-----------------------------|--|--|
| TYP.    | Zen   | Zener voltage : Vz(V) |        |      | Reverse current :<br>IR(uA) |  |  |
|         | MIN.  | MAX.                  | lz(mA) | MAX. | VR(V)                       |  |  |
| TDZ 5.1 | 4.60  | 5.60                  | 10     | 10   | 1.5                         |  |  |
| TDZ 5.6 | 5.10  | 6.10                  | 10     | 10   | 2.5                         |  |  |
| TDZ 6.2 | 5.60  | 6.80                  | 10     | 10   | 3.0                         |  |  |
| TDZ 6.8 | 6.20  | 7.40                  | 10     | 10   | 3.5                         |  |  |
| TDZ 7.5 | 6.80  | 8.30                  | 10     | 10   | 4.5                         |  |  |
| TDZ 8.2 | 7.40  | 9.00                  | 10     | 10   | 4.9                         |  |  |
| TDZ 9.1 | 8.20  | 10.00                 | 10     | 10   | 5.5                         |  |  |
| TDZ 10  | 9.00  | 11.00                 | 10     | 10   | 6.0                         |  |  |
| TDZ 11  | 9.90  | 12.10                 | 10     | 10   | 7.0                         |  |  |
| TDZ 12  | 10.80 | 13.20                 | 10     | 10   | 8.0                         |  |  |
| TDZ 13  | 11.70 | 14.30                 | 10     | 10   | 9.0                         |  |  |
| TDZ 15  | 13.50 | 16.50                 | 10     | 10   | 10.0                        |  |  |
| TDZ 16  | 14.40 | 17.60                 | 10     | 10   | 11.0                        |  |  |
| TDZ 18  | 16.20 | 19.80                 | 10     | 10   | 12.0                        |  |  |
| TDZ 20  | 18.00 | 22.00                 | 10     | 10   | 14.0                        |  |  |
| TDZ 22  | 19.80 | 24.20                 | 10     | 10   | 15.0                        |  |  |
| TDZ 24  | 21.60 | 26.40                 | 10     | 10   | 16.0                        |  |  |
| TDZ 27  | 24.30 | 29.70                 | 10     | 10   | 19.0                        |  |  |
| TDZ 30  | 27.00 | 33.00                 | 10     | 10   | 21.0                        |  |  |

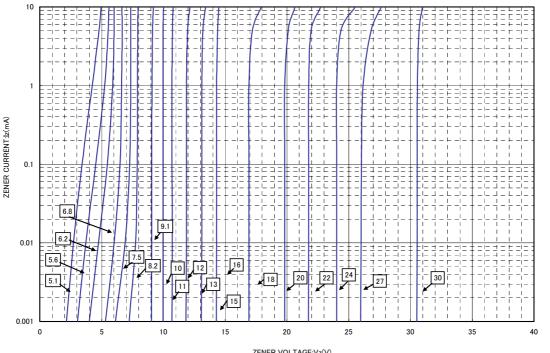
(1) The zener voltage(Vz) is measured 40ms after power is supplied.

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

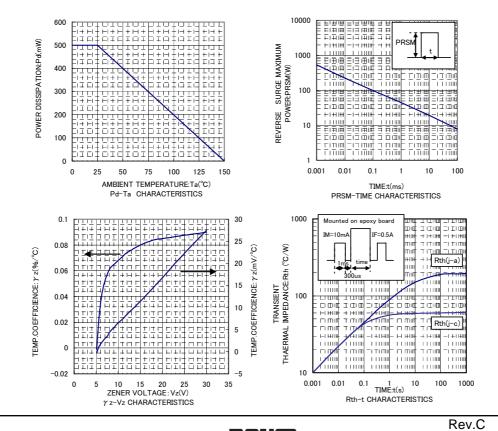
#### •Type No.

| TYPE    | TYPE NO. | TYPE   | TYPE NO. |
|---------|----------|--------|----------|
| TDZ 5.1 | A2       | TDZ 13 | 35       |
| TDZ 5.6 | C2       | TDZ 15 | 45       |
| TDZ 6.2 | E2       | TDZ 16 | 55       |
| TDZ 6.8 | F2       | TDZ 18 | 65       |
| TDZ 7.5 | H2       | TDZ 20 | 75       |
| TDZ 8.2 | J2       | TDZ 22 | 85       |
| TDZ 9.1 | L2       | TDZ 24 | 95       |
| TDZ 10  | 05       | TDZ 27 | A5       |
| TDZ 11  | 15       | TDZ 30 | C5       |
| TDZ 12  | 25       |        |          |

#### Diodes

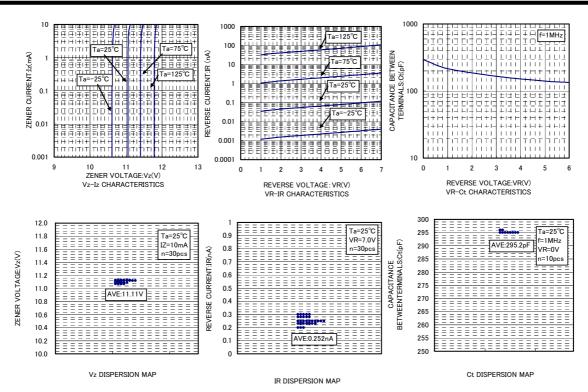


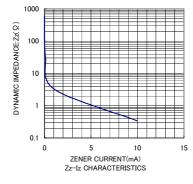




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#### Diodes





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Appendix1-Rev2.0

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