



# DZ36082D0L

Silicon epitaxial planar type

For surge absorption circuit

### ■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant  
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol: 03

### ■ Packaging

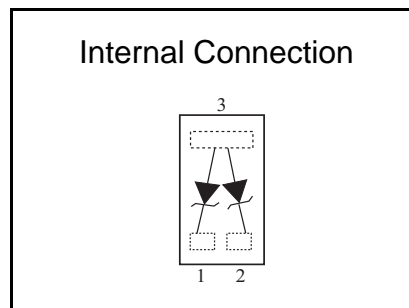
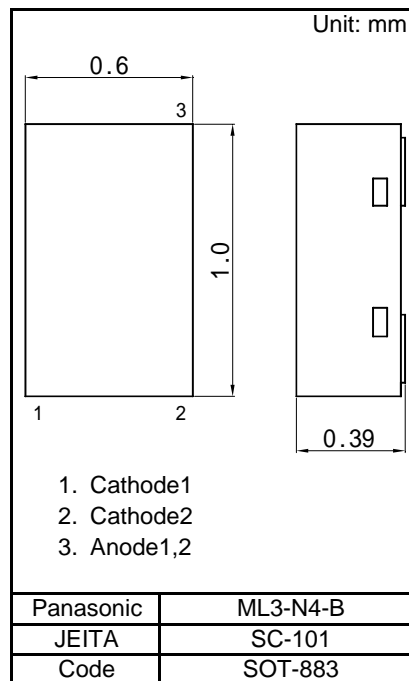
Embossed type (Thermo-compression sealing) : 10 000 pcs / reel (standard)

### ■ Absolute Maximum Ratings Ta = 25 °C

| Parameter                             | Symbol           | Rating      | Unit |
|---------------------------------------|------------------|-------------|------|
| Total power dissipation <sup>*1</sup> | PT               | 200         | mW   |
| Electrostatic discharge <sup>*2</sup> | ESD              | ±10         | kV   |
| Junction temperature                  | T <sub>j</sub>   | 150         | °C   |
| Operating ambient temperature         | T <sub>opr</sub> | -40 to +85  | °C   |
| Storage temperature                   | T <sub>stg</sub> | -55 to +150 | °C   |

Note) <sup>\*1</sup>: PT = 200 mW achieved with a printed circuit board.  
 ( 2 Diode total )

<sup>\*2</sup>: Test method:IEC61000\_4\_2(C = 150 pF,R = 330 Ω, Contact discharge:10 times)



### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

| Parameter  | Symbol          | Conditions              | Min  | Typ | Max  | Unit  |
|--|-----------------|-------------------------|------|-----|------|-------|
| Forward voltage  | V <sub>F</sub>  | I <sub>F</sub> = 10 mA  |      |     | 1.0  | V     |
| Zener voltage <sup>*1, *2</sup>                        | V <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   | 7.79 |     | 8.61 | V     |
| Zener operating resistance                             | R <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   |      |     | 30   | Ω     |
| Zener rise operating resistance                        | R <sub>ZK</sub> | I <sub>Z</sub> = 0.5 mA |      |     | 60   | Ω     |
| Reverse current  | I <sub>R</sub>  | V <sub>R</sub> = 5 V    |      |     | 0.1  | μA    |
| Temperature coefficient of zener voltage <sup>*3</sup> | SZ              | I <sub>Z</sub> = 5 mA   |      | 4.8 |      | mV/°C |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

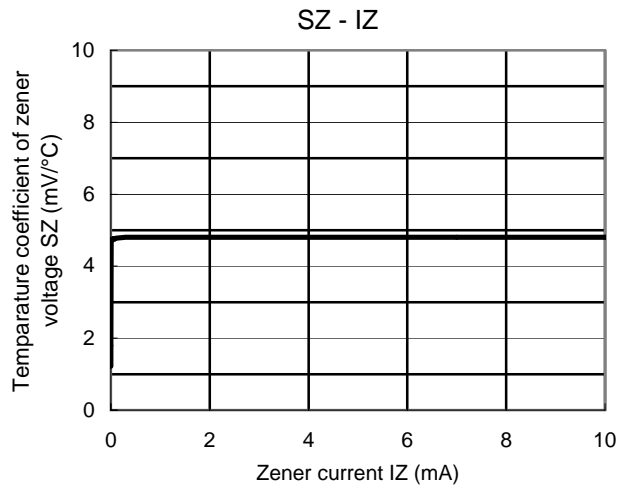
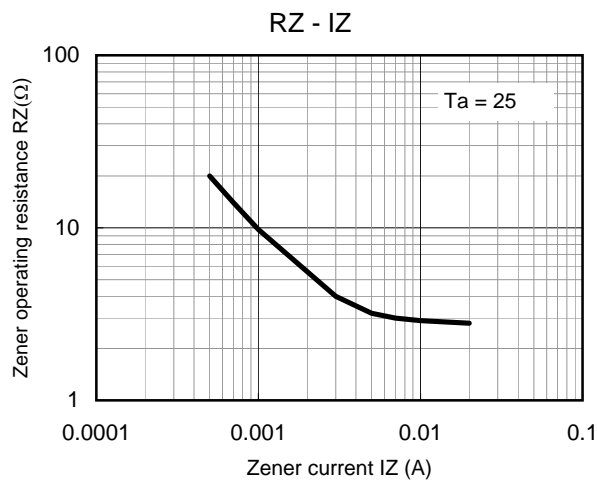
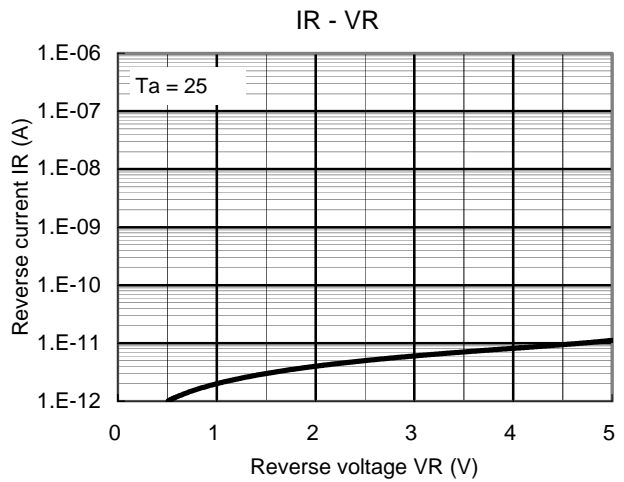
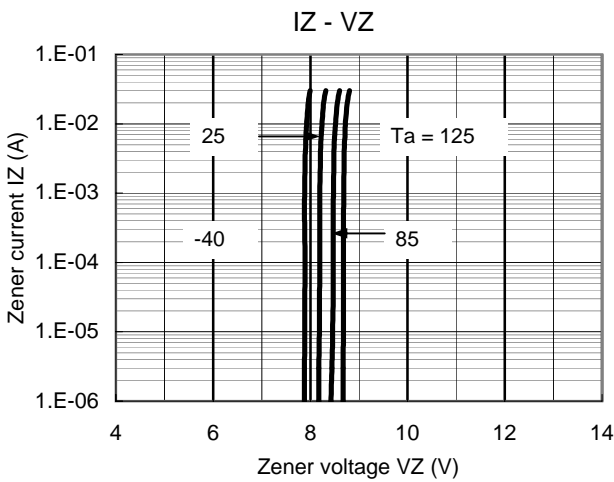
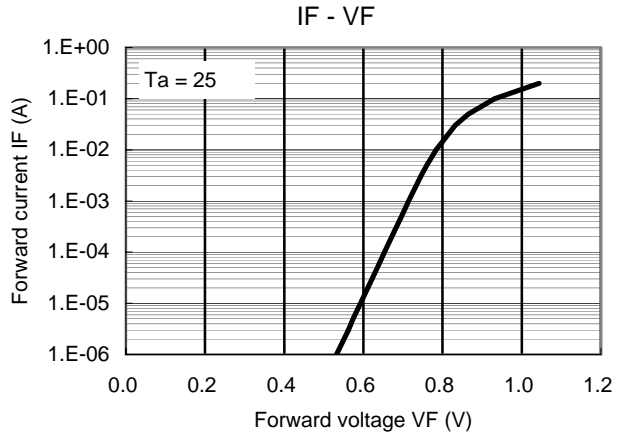
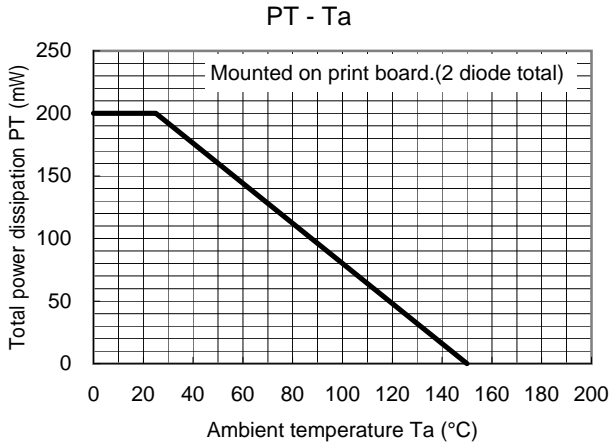
2. <sup>\*1</sup>: The temperature must be controlled 25°C for V<sub>Z</sub> measurement.

V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25°C)

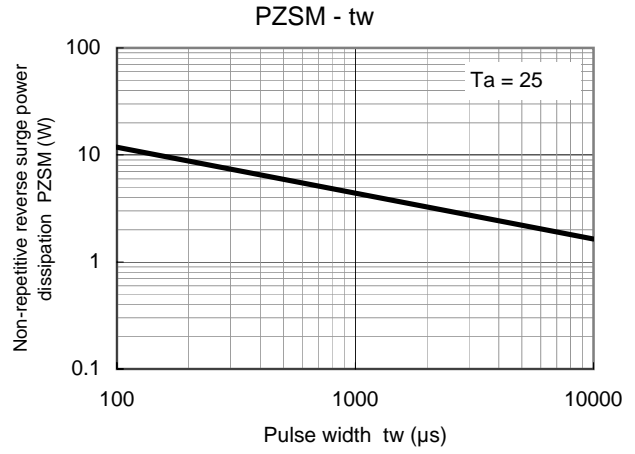
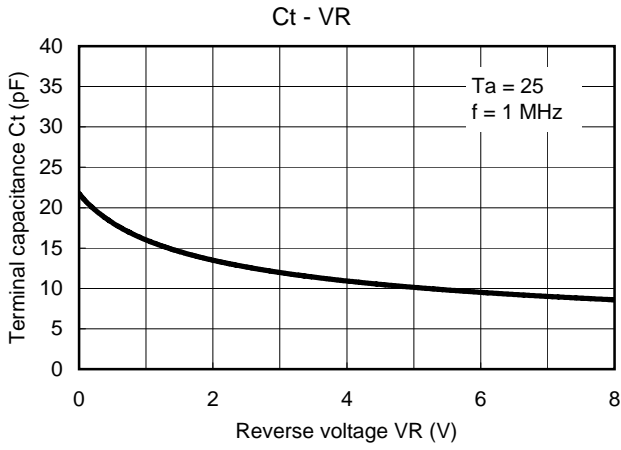
<sup>\*2</sup>: V<sub>Z</sub> guaranteed 20 ms after current flow.

<sup>\*3</sup>: T<sub>j</sub> = 25°C to 150°C

Technical Data ( reference )

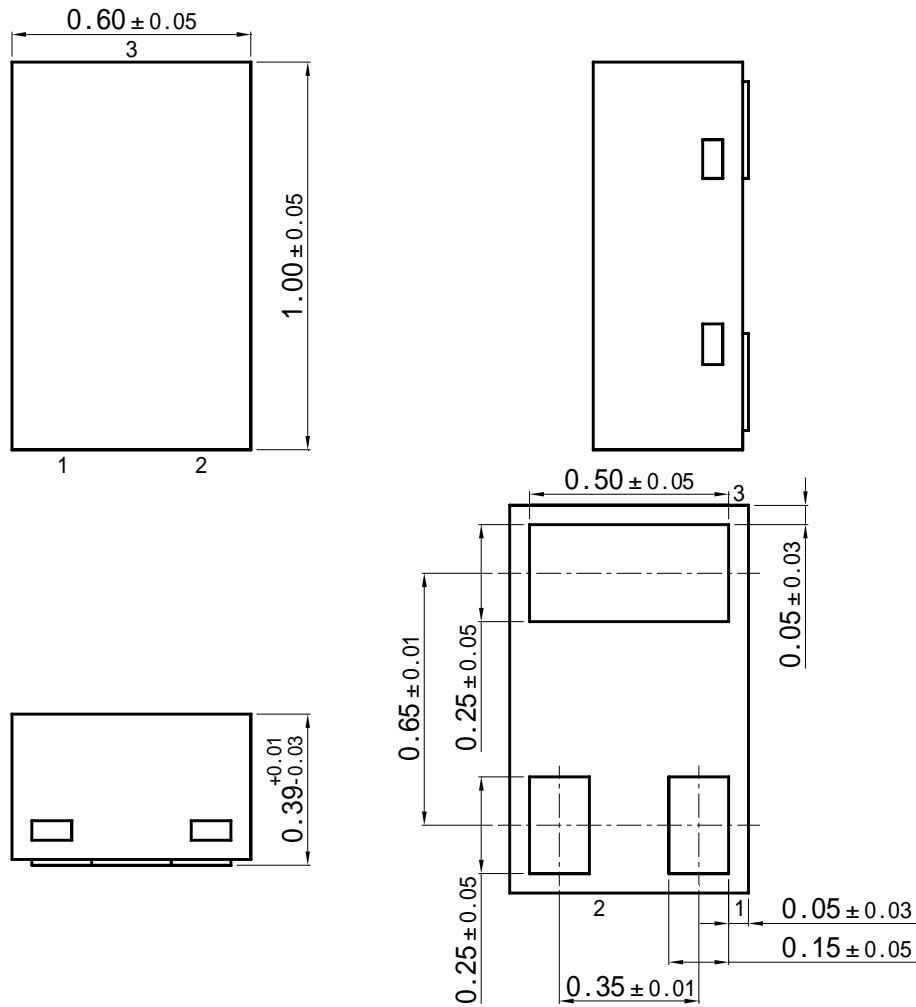


Technical Data ( reference )

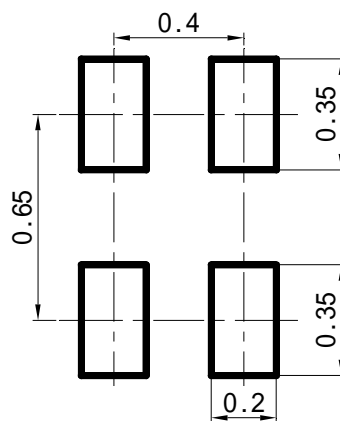


ML3-N4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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