Zener Diode

DZ37120D0L

Panasonic

DZ37120D0L

Silicon epitaxial planar type

For surge absorption circuit DZ3S120D in SSSMini3 type package

■ Features

- · Excellent rising characteristics of zener current Iz
- Low zener operating resistance Rz
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: 05

■ Packaging

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

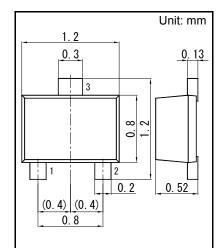
■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|-------------------------------|--------|-------------|------|
| Total power dissipation *1 | PT | 150 | mW |
| Electrostatic discharge *2 | ESD | ±10 | kV |
| Junction temperature | Tj | 150 | °C |
| Operating ambient temperature | Topr | -40 to +85 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |

Note) *1: Mounted on glass epoxy print board. (45 mm x 45 mm x 1 mm) (2 Diode total)

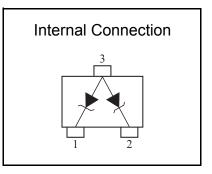
Solder in (Recommended land pattern)

*2: Test method:IEC61000_4_2(C = 150 pF,R = 330 Ω , Contact discharge:10 times)



- 1. Cathode1
- 2. Cathode2
- 3. Anode1,2

| Panasonic | SSSMini3-F2-B |
|-----------|---------------|
| JEITA | SC-105AA |
| Code | SOT-723 |



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

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|---|--------|-------------|-------|-----|-------|-------|
| Forward voltage | VF | IF = 10 mA | | | 1.0 | V |
| Zener voltage *1, *2 | VZ | IZ = 5 mA | 11.40 | | 12.60 | V |
| Zener operating resistance | RZ | IZ = 5 mA | | | 30 | Ω |
| Zener rise operating resistance | RZK | IZ = 0.5 mA | | | 80 | Ω |
| Reverse current | IR | VR = 9 V | | | 0.05 | μA |
| Temperature coefficient of zener voltage *3 | SZ | IZ = 5 mA | | 8.5 | | mV/°C |

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

- *1: The temperature must be controlled 25°C for VZ mesurement.
 VZ value measured at other temperature must be adjusted to VZ (25°C)
 - *2: VZ guaranted 20 ms after current flow.
 - *3: Tj = 25°C to 150°C

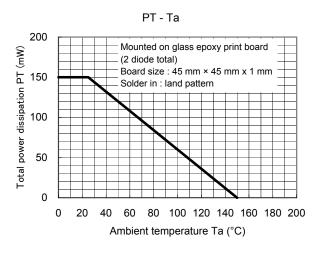
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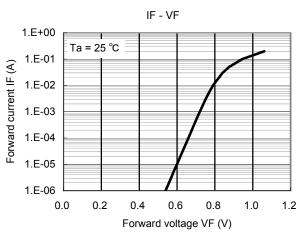
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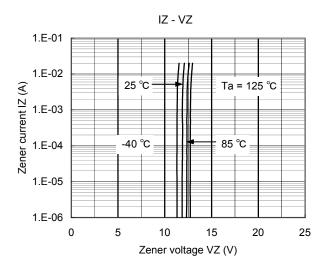
Zener Diode

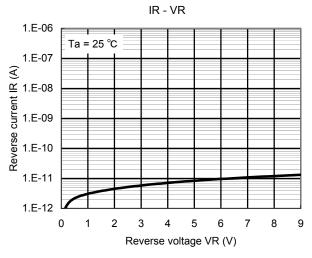
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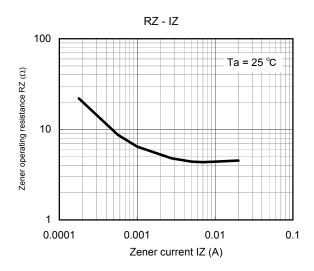
Technical Data (reference)

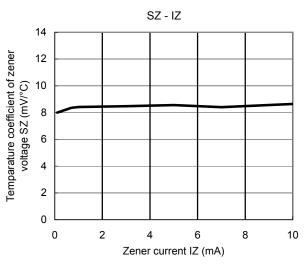












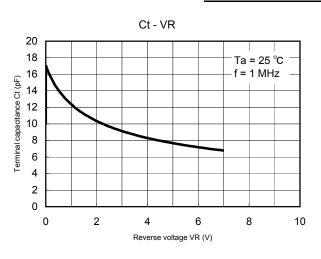
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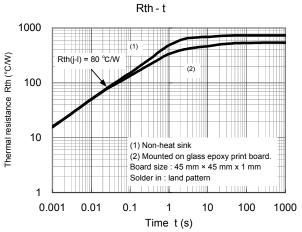
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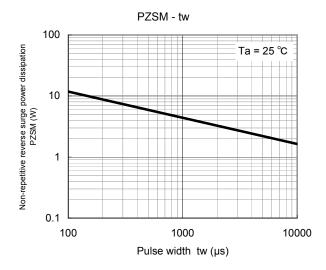
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Technical Data (reference)







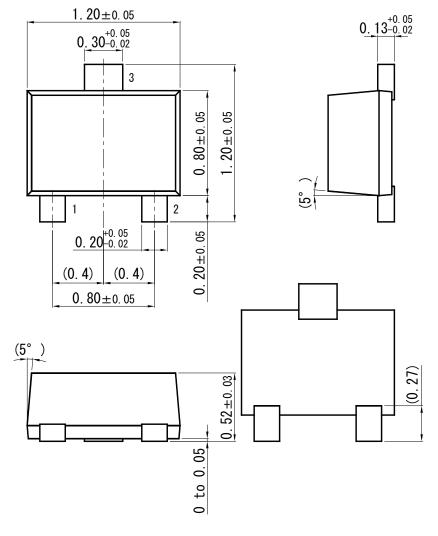
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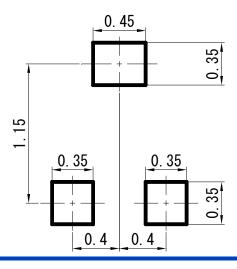
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SSSMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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