

DE37120D0L

Silicon epitaxial planar type

For ESD protection

■ Features

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

■ Marking Symbol: 48

■ Packaging

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

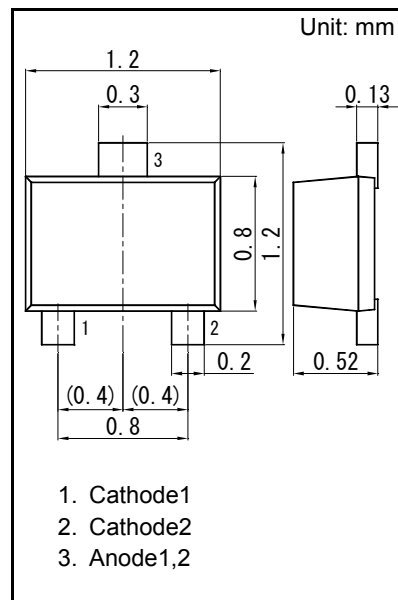
■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|------------------|-------------|------|
| Total power dissipation ^{*1} | PT | 150 | mW |
| Electrostatic discharge ^{*2} | ESD | ±15 | kV |
| Junction temperature | T _j | 150 | °C |
| Operating ambient temperature | T _{opr} | -40 to +85 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

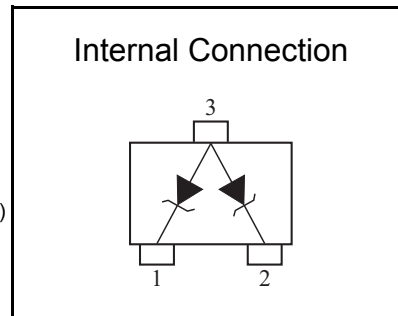
Note) *1: PT = 150 mW achieved with a printed circuit board.

(2 Diode total)

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



| | |
|-----------|---------------|
| Panasonic | SSSMINI3-F2-B |
| JEITA | SC-105AA |
| Code | SOT-723 |



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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--|----------------|------------------------|-------|-----|-------|-------|
| Forward voltage | V _F | I _F = 10 mA | | | 1.0 | V |
| Zener voltage ^{*1, *2} | V _Z | I _Z = 5 mA | 11.40 | | 12.60 | V |
| Zener operating resistance | R _Z | I _Z = 5 mA | | | 30 | Ω |
| Reverse current | I _R | V _R = 9 V | | | 0.05 | μA |
| Temperature coefficient of zener voltage ^{*3} | SZ | I _Z = 5 mA | | 8.5 | | mV/°C |

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

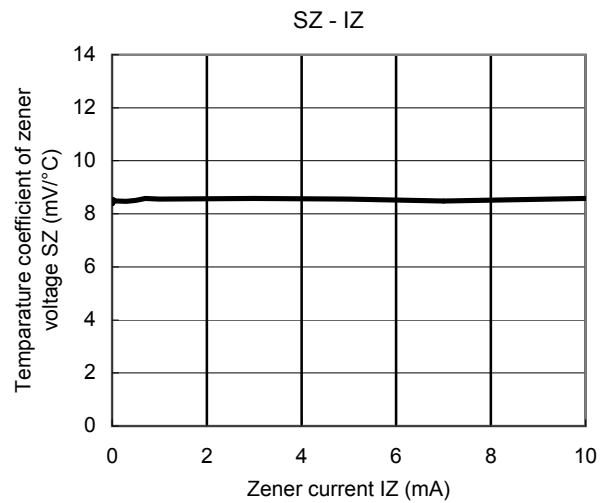
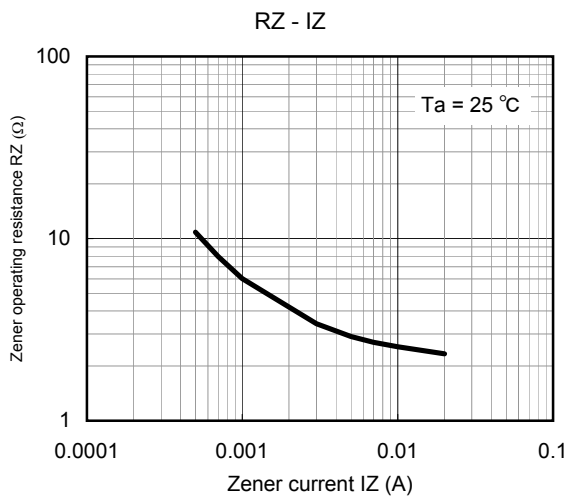
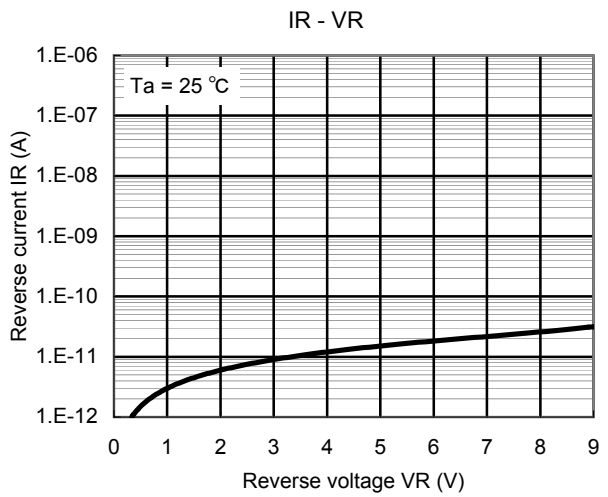
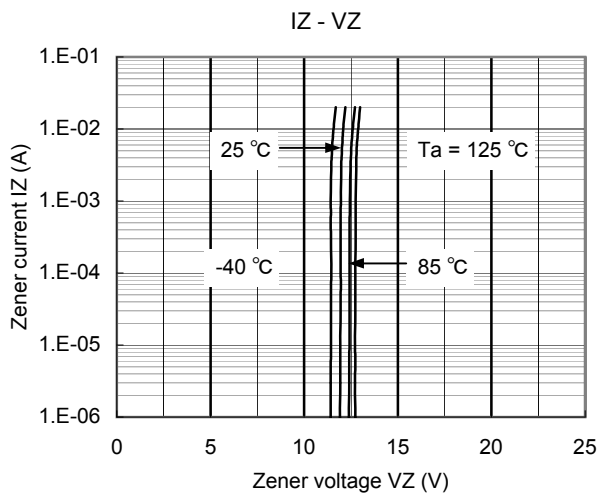
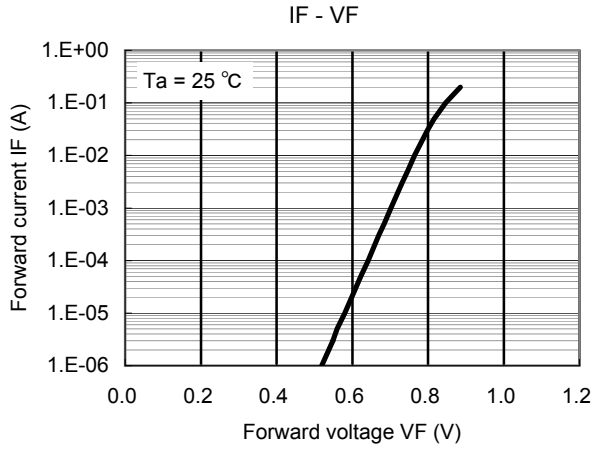
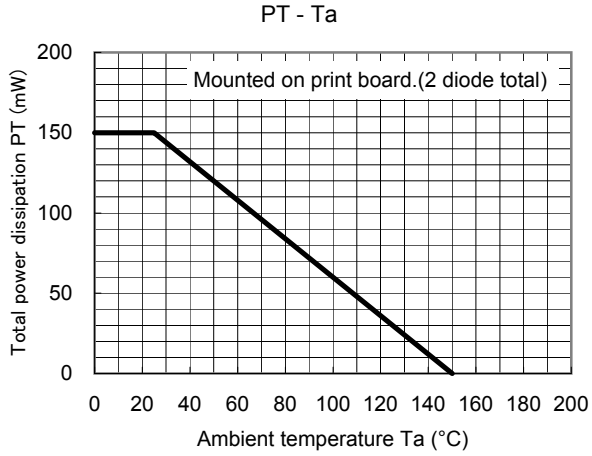
2. *1: The temperature must be controlled 25°C for V_Z measurement.

V_Z value measured at other temperature must be adjusted to V_Z (25°C)

*2: V_Z guaranteed 20 ms after current flow.

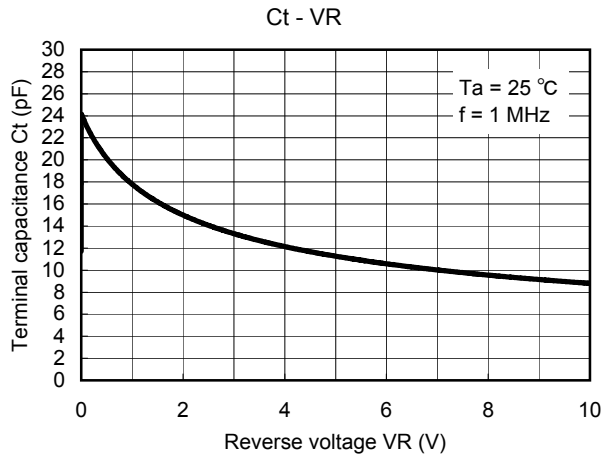
*3: T_j = 25°C to 150°C

Technical Data (reference)





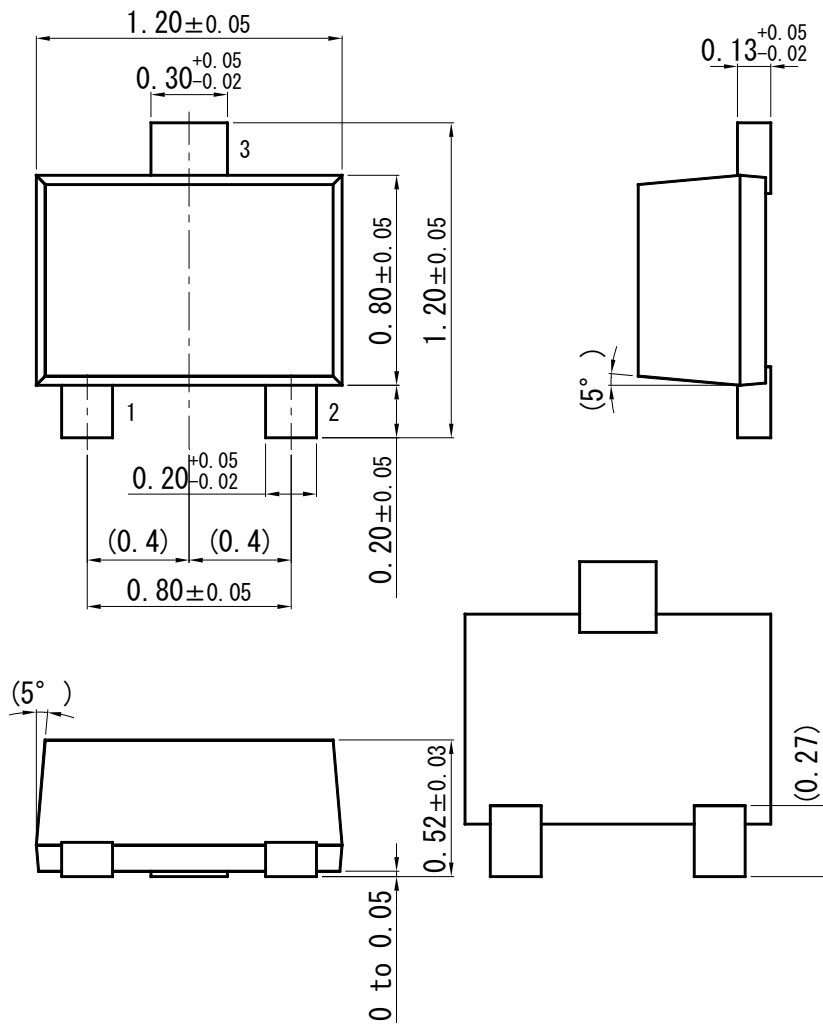
Technical Data (reference)



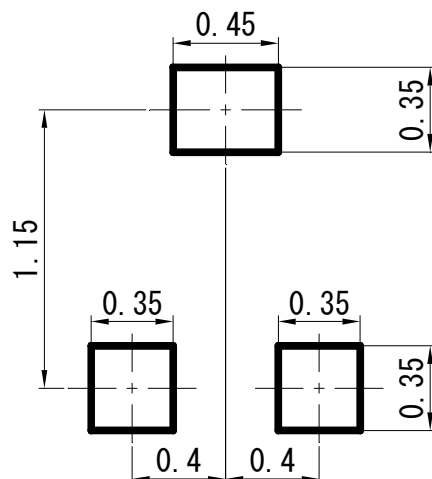


SSSMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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