Zener Diode

DZ2S039×0L

Panasonic

DZ2S039×0L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit DZ2J039 in SSMini2 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: 7J or 7U

■ Packaging

Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

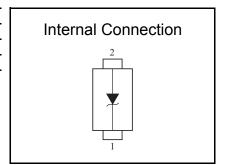
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|---------------------------------|--------|-------------|------|
| Parameter | Symbol | Rating | Unit |
| Repetitive peak forward current | IFRM | 200 | mA |
| Total power dissipation *1 | PT | 150 | mW |
| Electrostatic discharge *2 | ESD | ±15 | 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 ($45 \text{ mm} \times 45 \text{ mm} \times 1 \text{ mm}$) Solder in ($0.8 \text{ mm} \times 0.6 \text{ mm}$)

*2 Test method : IEC61000_4_2

(C = 150 pF, R = 330 $\Omega,$ Contact discharge : 10 times)

Unit: mm 0.8 0.13 2 1. Cathode 2. Anode Panasonic SSMini2-F5-B JEITA SC-79



SOD-523

Code

■ 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 | 3.71 | | 4.10 | V |
| Zener operating resistance | RZ | IZ = 5 mA | | | 130 | Ω |
| Reverse current | IR | VR = 1 V | | | 10 | μΑ |
| Temperature coefficient of zener voltage *3 | SZ | IZ = 5 mA | | -1.3 | | mV/°C |

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
 - 2. Absolute frequency of input and output is 5 MHz.
 - *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

Rank classification

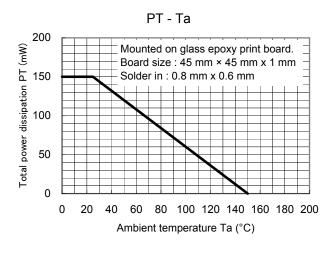
| Code | M | | 0 | | | |
|----------------|------|----|---------|------|----|------|
| Rank | M | | No-rank | | | |
| VZ | 3.80 | to | 4.00 | 3.71 | to | 4.10 |
| Marking symbol | | 7U | | | 7J | |

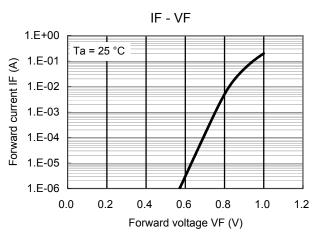
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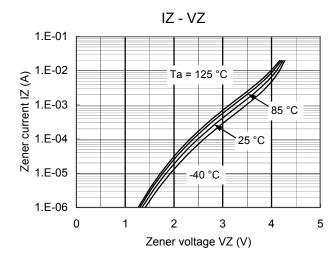
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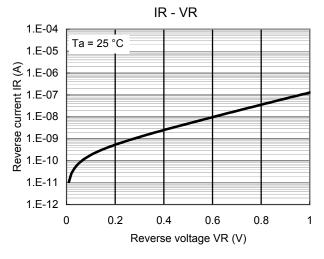
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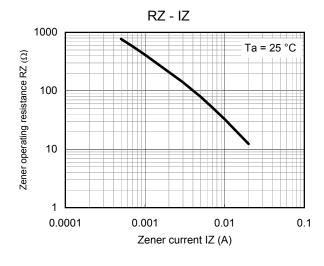
Technical Data (reference)

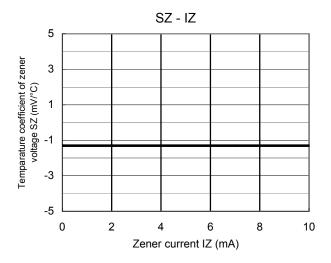












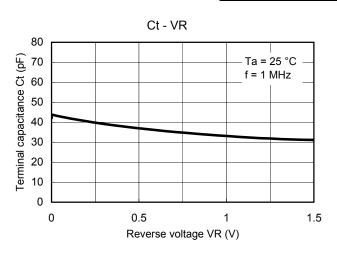
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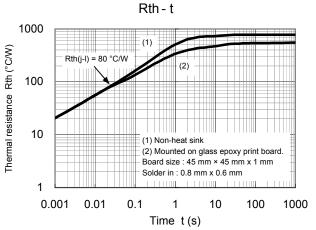
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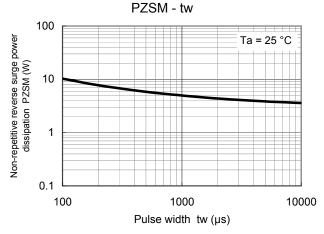
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Technical Data (reference)







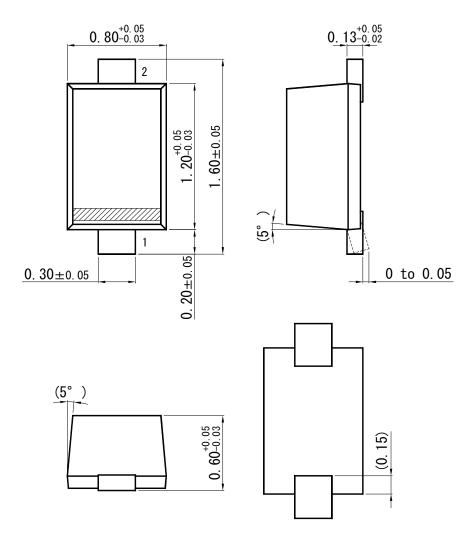
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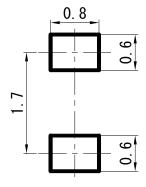
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SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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