



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





DZ3X068D0L

Silicon epitaxial planar type

For surge absorption circuit

■ 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:02

■ Packaging

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

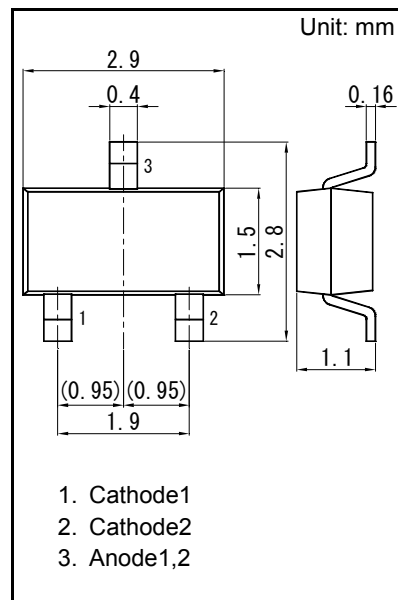
■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|------------------|-------------|------|
| Total power dissipation ^{*1} | PT | 200 | mW |
| Electrostatic discharge ^{*2} | ESD | ±10 | kV |
| Junction temperature | T _j | 150 | °C |
| Operating ambient temperature | T _{opr} | -40 to +85 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

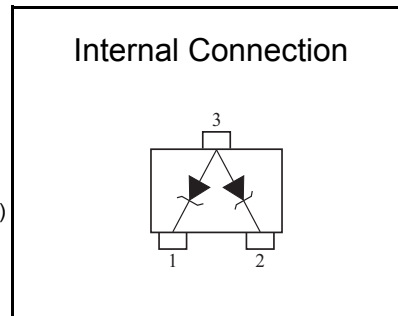
Note) *1: Mounted on glass epoxy print board. (45 mm x 45 mm x 1 mm)
 (2 Diode total)

Solder in (1.0 mm x 1.0 mm)

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



| | |
|-----------|-----------------|
| Panasonic | Mini3-G3-B |
| JEITA | SC-59A |
| Code | TO-236AA/SOT-23 |



■ 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 | 6.46 | | 7.14 | V |
| Zener operating resistance | R _Z | I _Z = 5 mA | | | 30 | Ω |
| Zener rise operating resistance | R _{ZK} | I _Z = 0.5 mA | | | 60 | Ω |
| Reverse current | I _R | V _R = 4 V | | | 0.1 | μA |
| Temperature coefficient of zener voltage ^{*3} | SZ | I _Z = 5 mA | | 3.1 | | mV/°C |

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

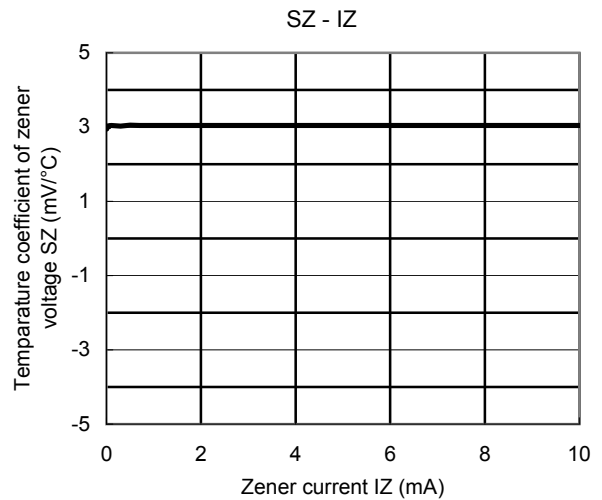
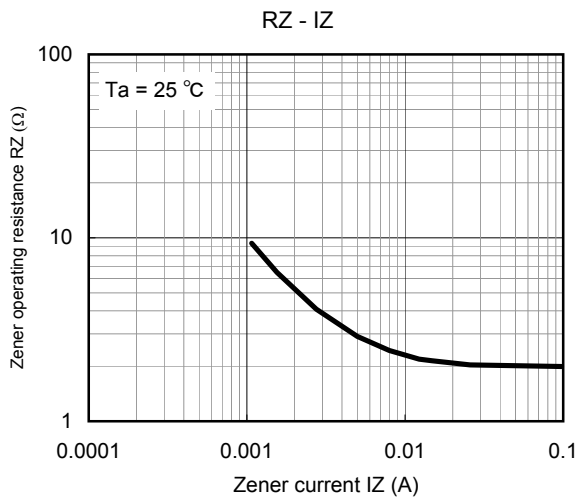
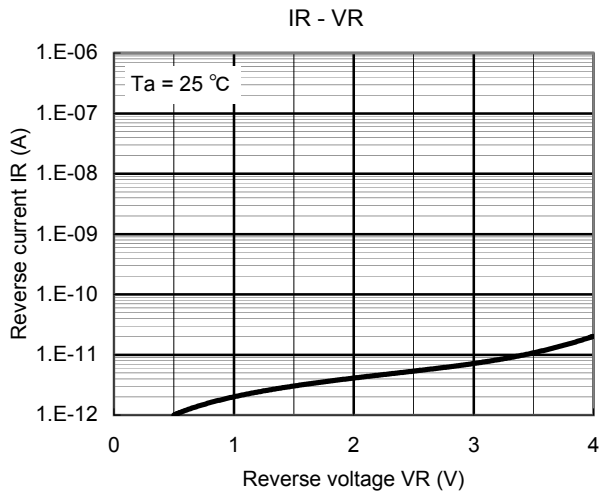
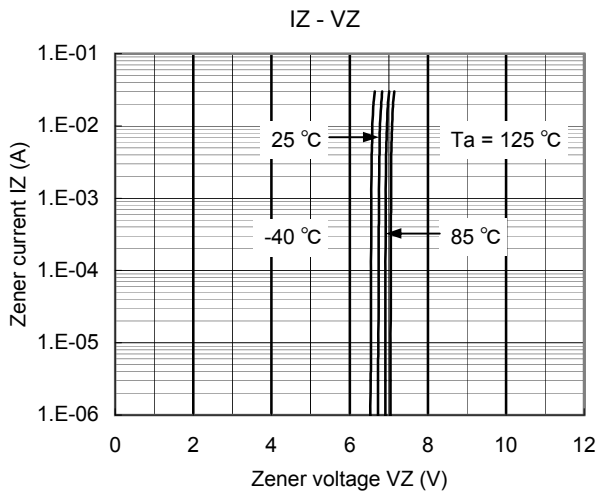
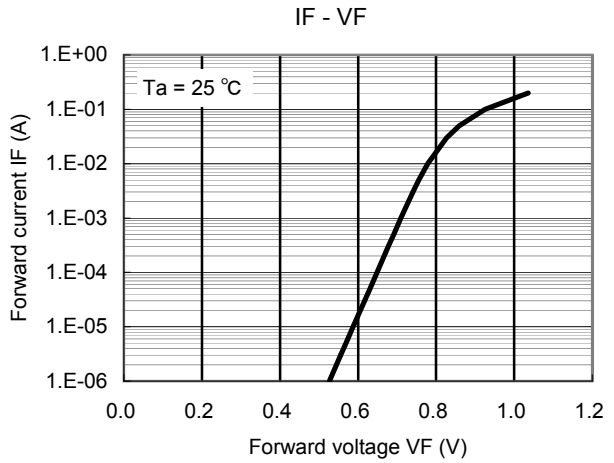
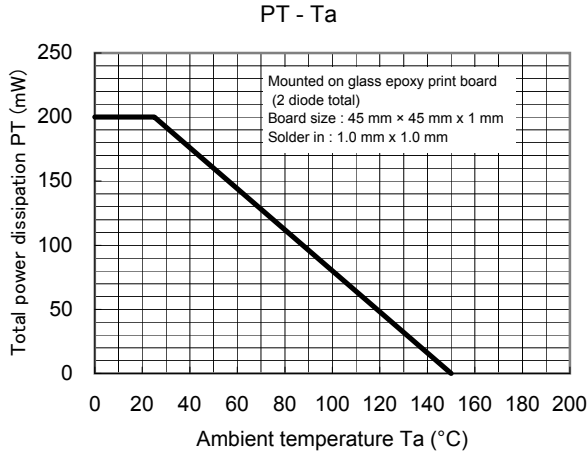
2. *1: The temperature must be controlled 25°C for V_Z measurement.

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

*2: V_Z guaranteed 20 ms after current flow.

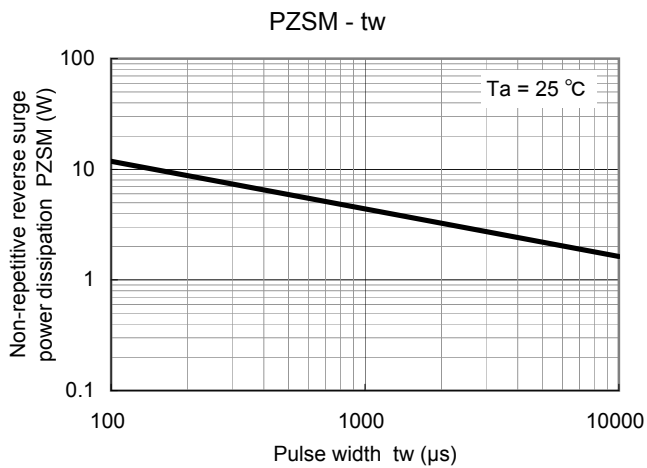
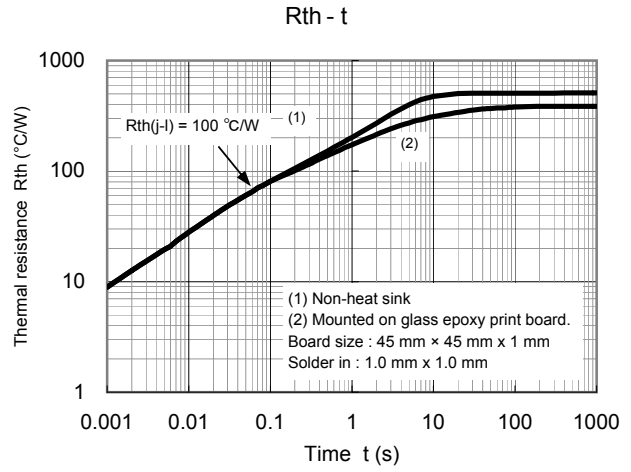
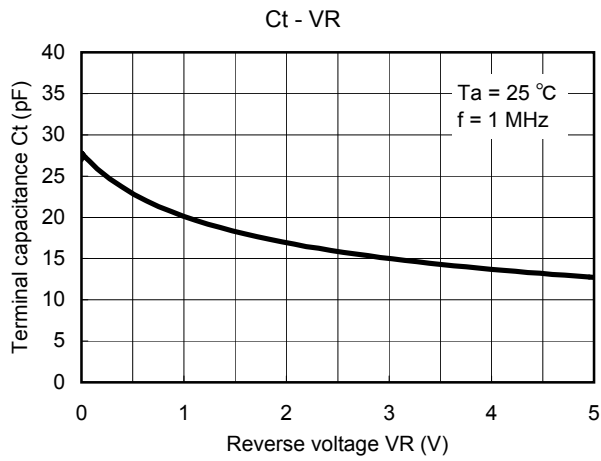
*3: T_j = 25°C to 150°C

Technical Data (reference)



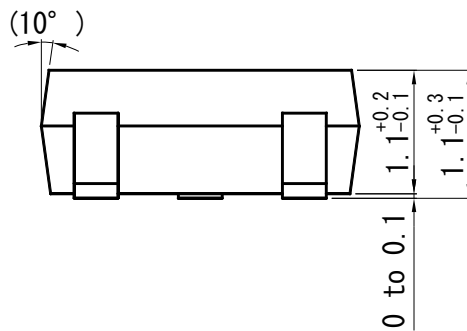
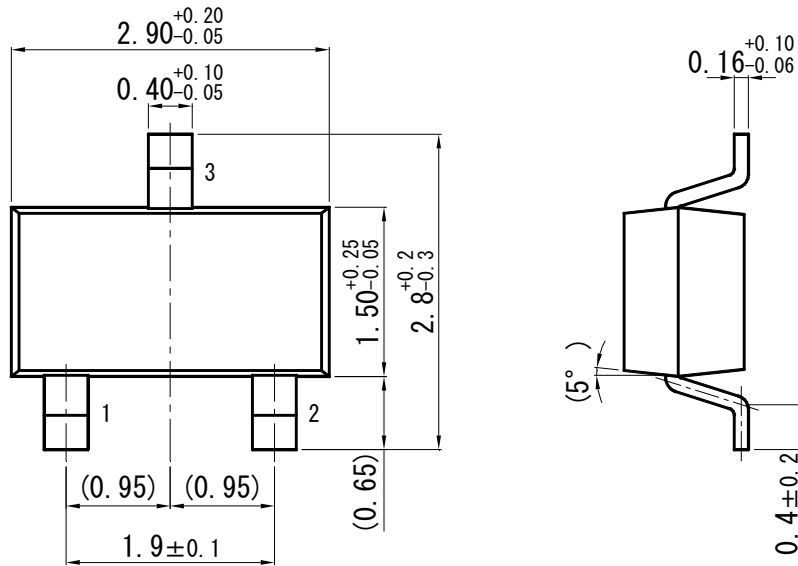


Technical Data (reference)

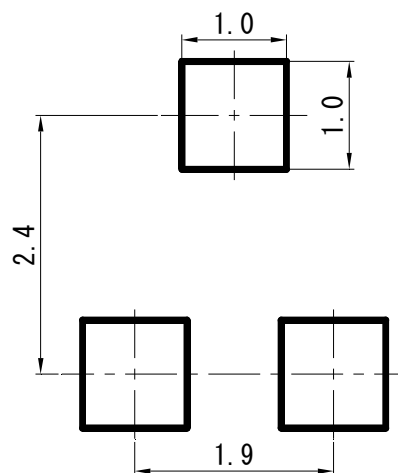


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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