Zener Diode

Panasonic

DZ3S120D0L

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Silicon epitaxial planar type

For surge absorption circuit
DZ3X120D in SSMini3 type package

■ Features

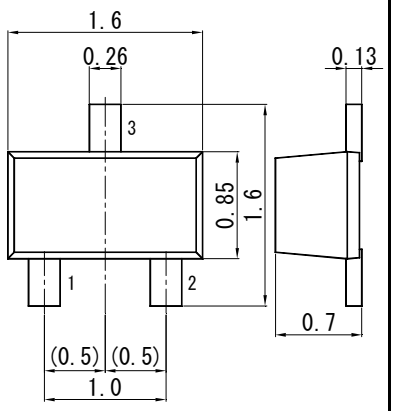
- Excellent rising characteristics of zener current Iz
- Low zener operating resistance Rz
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: 05

■ Packaging

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

Unit: mm



1. Cathode1
2. Cathode2
3. Anode1,2

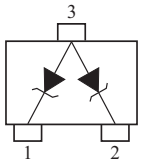
Panasonic	SSMini3-F3-B
JEITA	SC-89
Code	SOT-490

■ 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 (0.6 mm x 0.6 mm)
*2: Test method:IEC61000_4_2(C = 150 pF,R = 330 Ω, Contact discharge:10 times)

Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	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.
2. *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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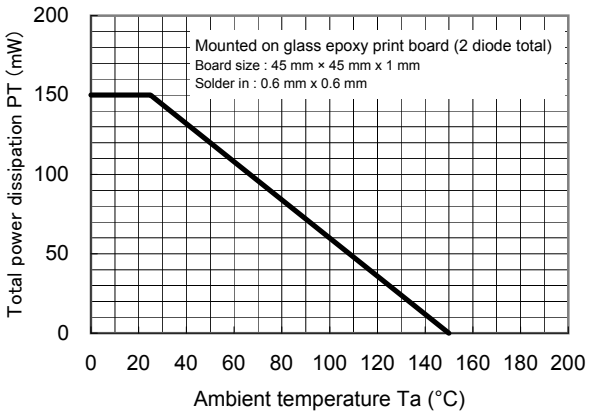
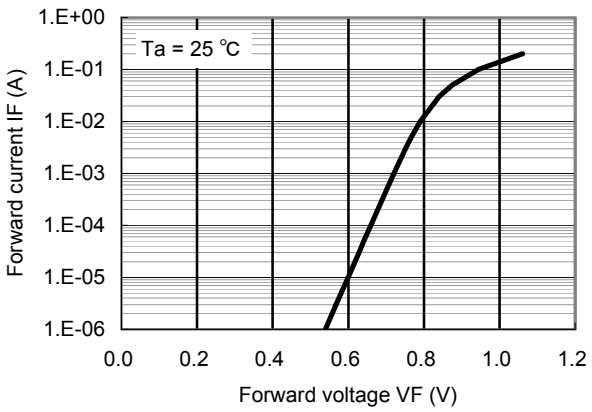
Zener Diode
DZ3S120D0L

Technical Data (reference)

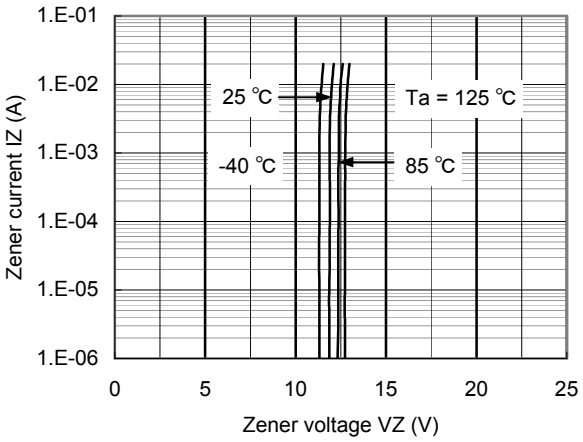
PT - Ta



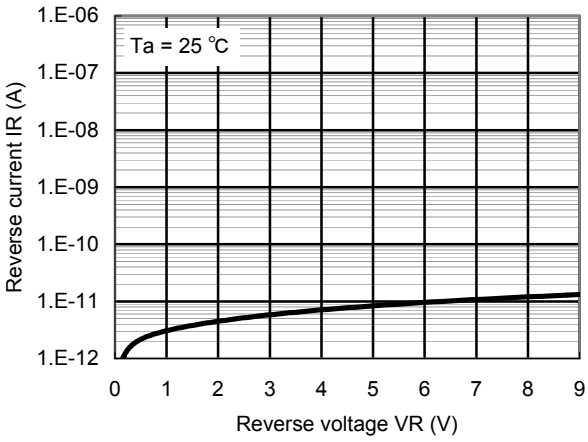
IF - VF



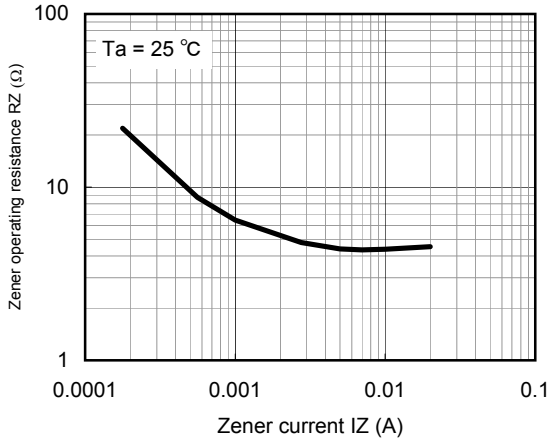
IZ - VZ



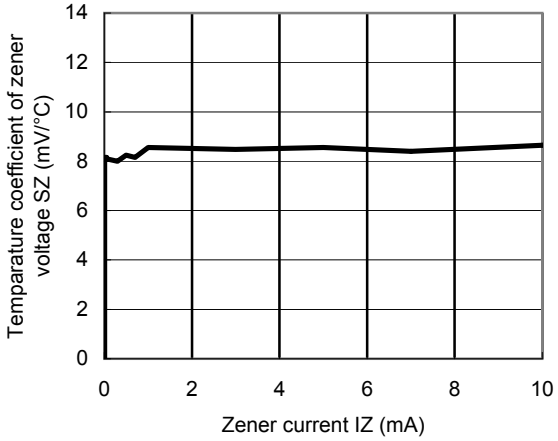
IR - VR



RZ-IZ



SZ - IZ



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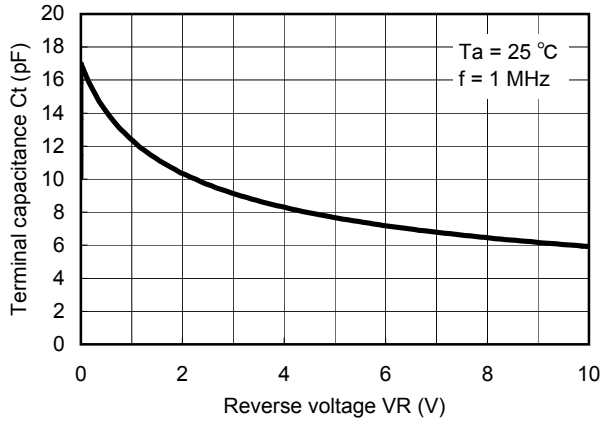
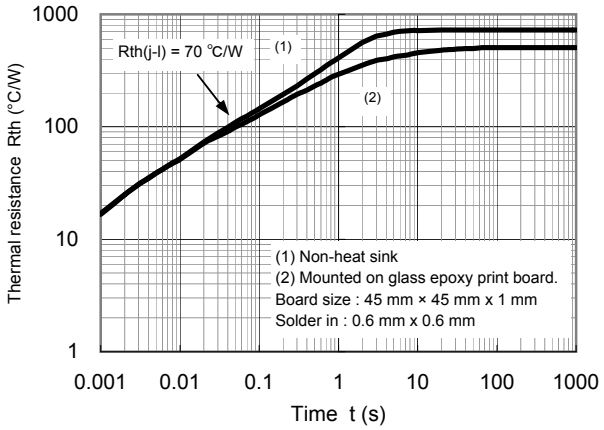
Technical Data (reference)

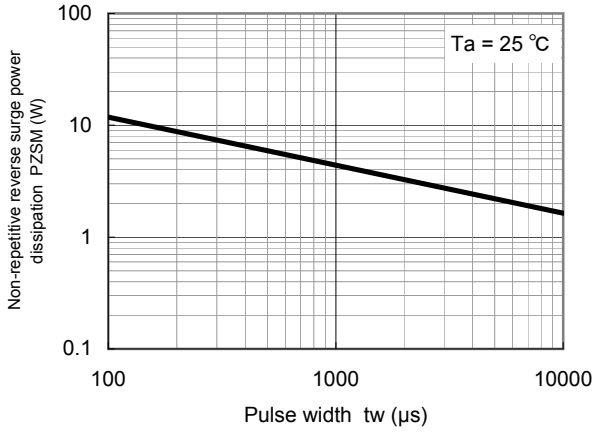
Ct - VR



Rth - t



PZSM - tw



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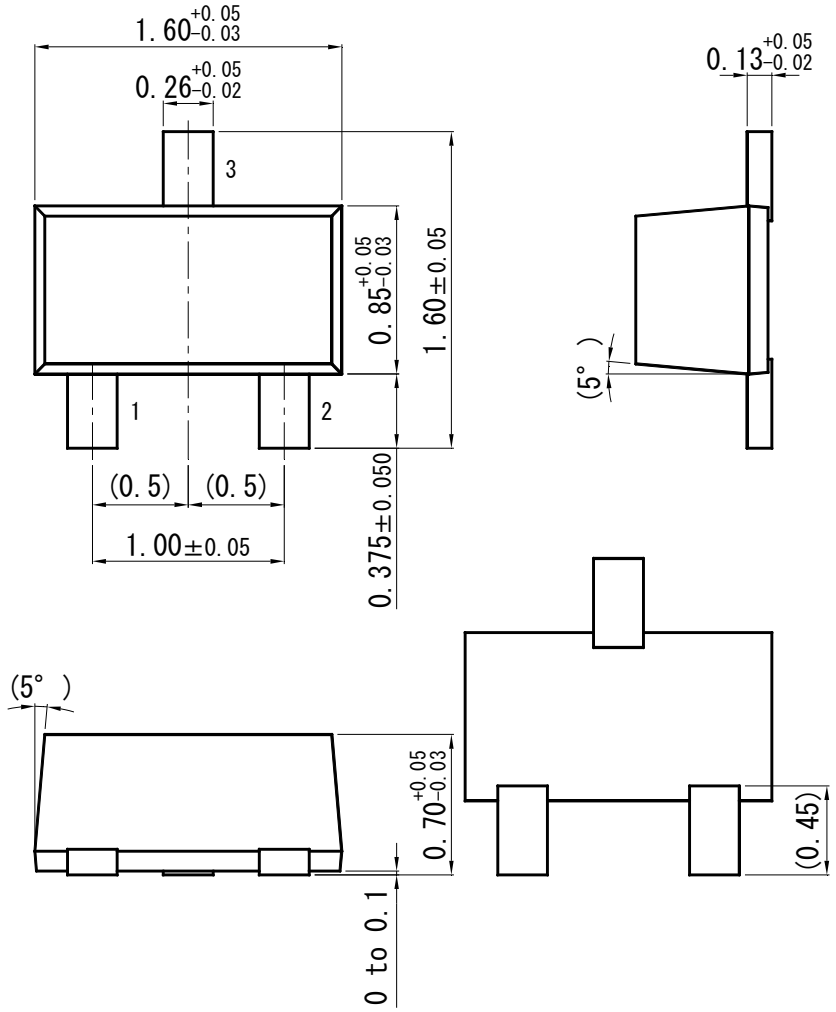
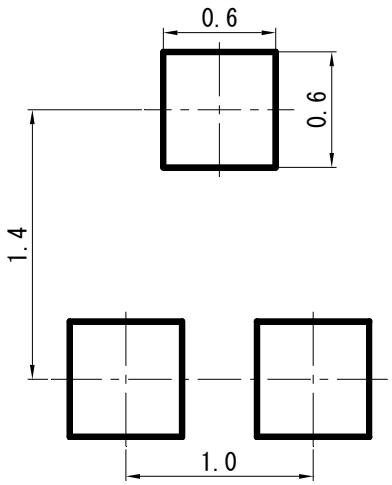
SSMini3-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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