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

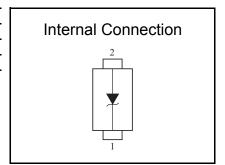
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Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation *1	PT	150	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	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

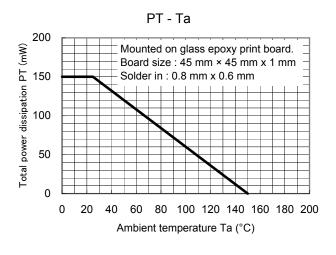
Code	M		0			
Rank	M		No-rank			
VZ	3.80	to	4.00	3.71	to	4.10
Marking symbol		7U			7J	

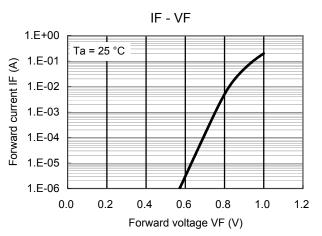
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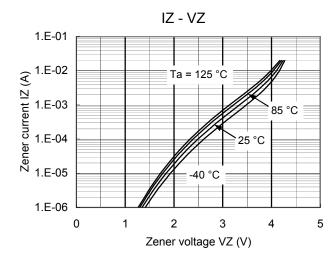
Zener Diode

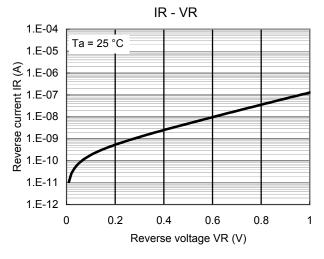
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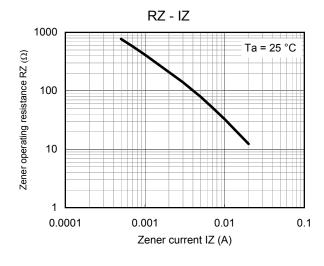
# Technical Data (reference)

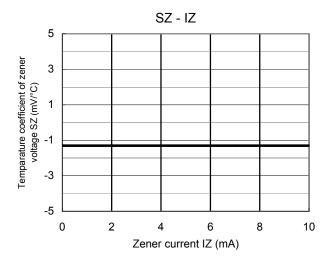












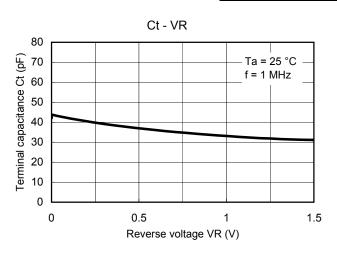
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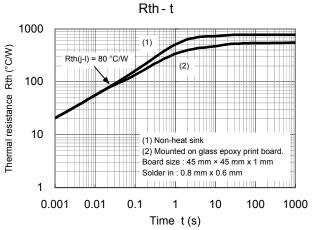
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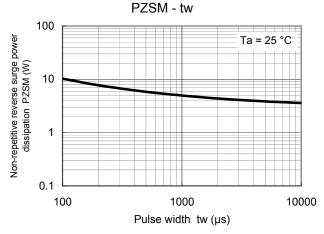
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# Technical Data (reference)







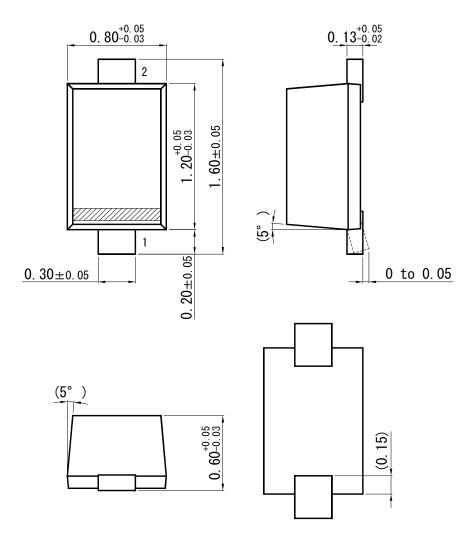
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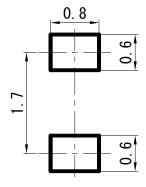
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SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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