Panasonic

DZ4J039K0R

Zener Diode

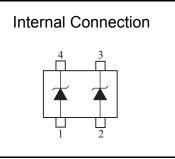
Silicon epitaxial planar type

Unit: mm 2.0 For constant voltage / For surge absorption circuit <u>0. 3</u> 0 13 4 Features Excellent rising characteristics of zener current Iz 25 Low zener operating resistance Rz Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant) 1 2 0.7 Marking Symbol: 7J (0.65)(0.65) Basic Part Number : 1.3 Dual DZ2J039 (Parallel) Packaging 3. Cathode-2 1. Anode-1 Embossed type (Thermo-compression sealing) 3 000 pcs / reel (standard) 4. Cathode-1 2. Anode-2 Panasonic SMini4-F3-B Absolute Maximum Ratings Ta = 25 °C JEITA SC-113BB Parameter Rating Unit Code Symbol ~ ~ ~

Repetitive peak forward current	IFRIVI	200	ШA	_	
Total power dissipation ^{*1}	PT	200	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 mm x 45 mm x 1 mm) Solder in (0.8 mm x 0.8 mm)

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



■ 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	μA		
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.

3. *1: The temperature must be controlled 25 °C for VZ mesurement.

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

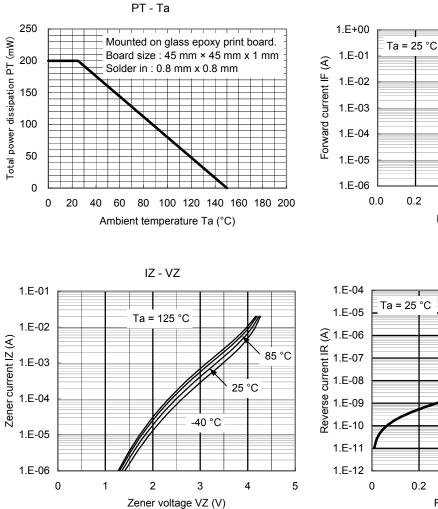
*2: VZ guaranted 20 ms after current flow.

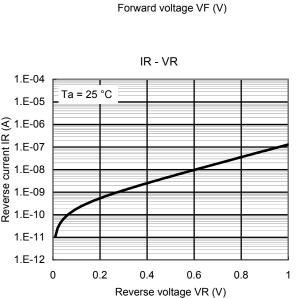
*3: Tj = 25 °C to 150 °C



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Technical Data (reference)





SZ - IZ

4

6

Zener current IZ (mA)

0.4

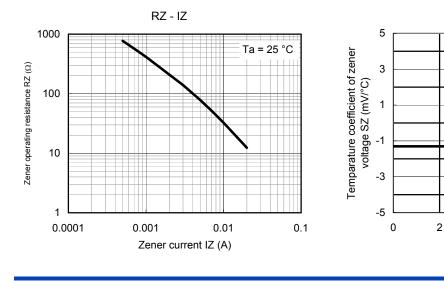
0.6

0.8

1.0

1.2

IF - VF





10

8

Established : 2009-12-21 Revised : 2013-10-04 80

70

60

50 40 30

20

10

0

0

100

10

1

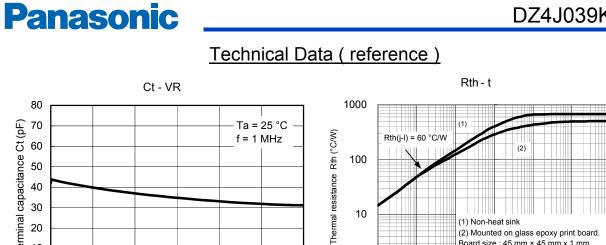
0.5

Reverse voltage VR (V)

PZSM - tw

1

Terminal capacitance Ct (pF)



100

10

1

0.001

0.01

0.1

1.5

Ta = 25 °C

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(1) Non-heat sink

1

Time t (s)

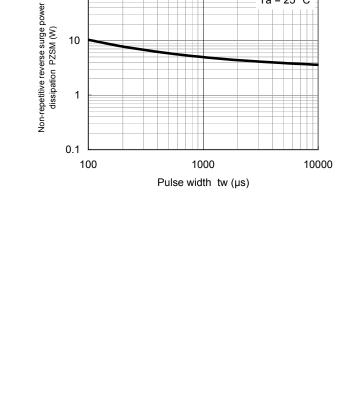
(2) Mounted on glass epoxy print board. Board size : 45 mm × 45 mm x 1 mm

10

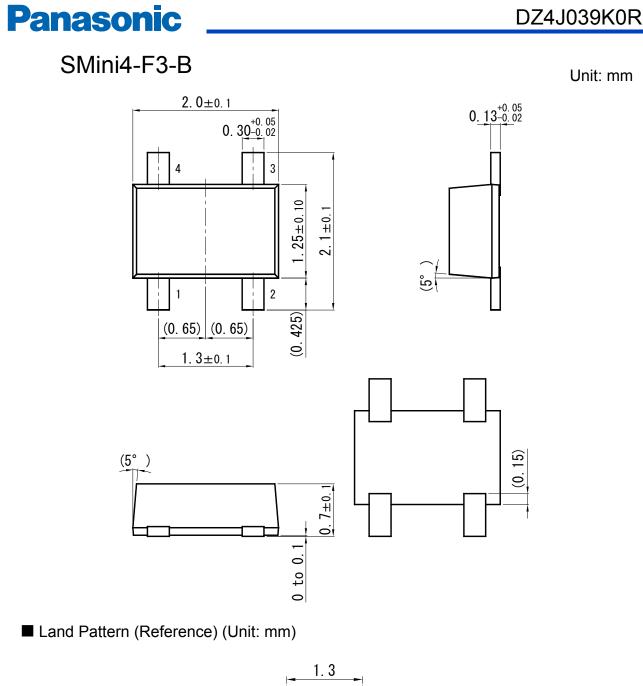
100

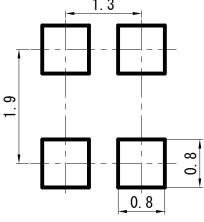
1000

Solder in : 0.8 mm x 0.8 mm



Established : 2009-12-21 : 2013-10-04 Revised





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