Panasonic

Zener Diode DZ2J033×0L

DZ2J033×0L Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

- Features
- Excellent rising characteristics of zener current Iz ٠
- · Low zener operating resistance Rz
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: 5J or 5U

Packaging

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

Absolute Maximum Ratings Ta = 25 °C Parameter Symbol

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation *1	PT	200	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	Tj	150	С°
Operating ambient temperature	Topr	-40 to +85	С°
Storage temperature	Tstg	-55 to +150	°C

rsig Note) *1 Mounted on glass epoxy print board ($45~\text{mm}\times45~\text{mm}\times1~\text{mm}$) Solder in (Recommended land pattern)

*2 Test method : IEC61000_4_2

(C = 150 pF, R = 330 Ω, Contact discharge : 10 times)



	<u>1</u> 00					
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 10 mA			1.0	V
Zener voltage ^{*1, *2}	VZ	IZ = 5 mA	3.14		3.47	V
Zener operating resistance	RZ	IZ = 5 mA			130	Ω
Reverse current	IR	VR = 1 V			20	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		-2.1		mV/°C

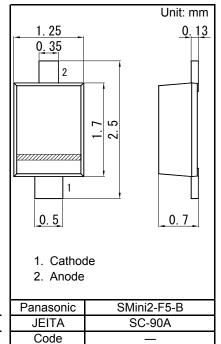
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

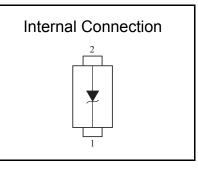
2. Absolute frequency of input and output is 5 MHz.

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	Rank classification	1	
*3 Tj = 25 °C to 150 °C	Code	Code M Rank M	
	Rank		
	VZ	3.22 to 3.38	3.14 to 3.47
	Marking symbol	5U	5J

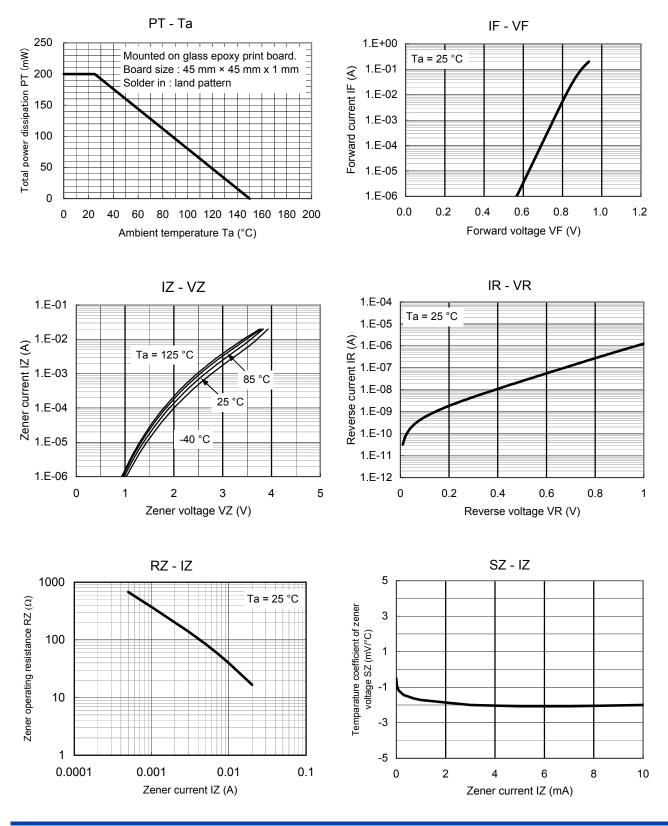






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Technical Data (reference)



Established : 2009-10-14 Revised : 2013-07-01 Terminal capacitance Ct (pF)

20

10

0 0

100

10

1

0.1 100

Non-repetitive reverse surge power dissipation PZSM (W)

0.2

0.4

PZSM - tw

0.6

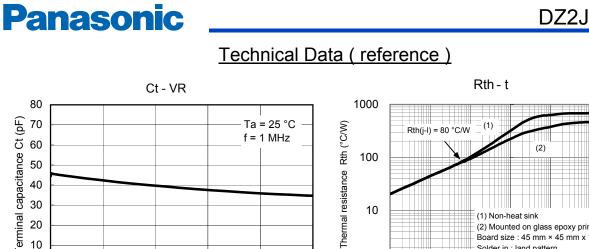
Reverse voltage VR (V)

1000

Pulse width tw (µs)

0.8

Ta = 25 °C



1

10000

10

1

0.001

0.01

0.1

(1) Non-heat sink

Solder in : land pattern 11111

1

Time t (s)

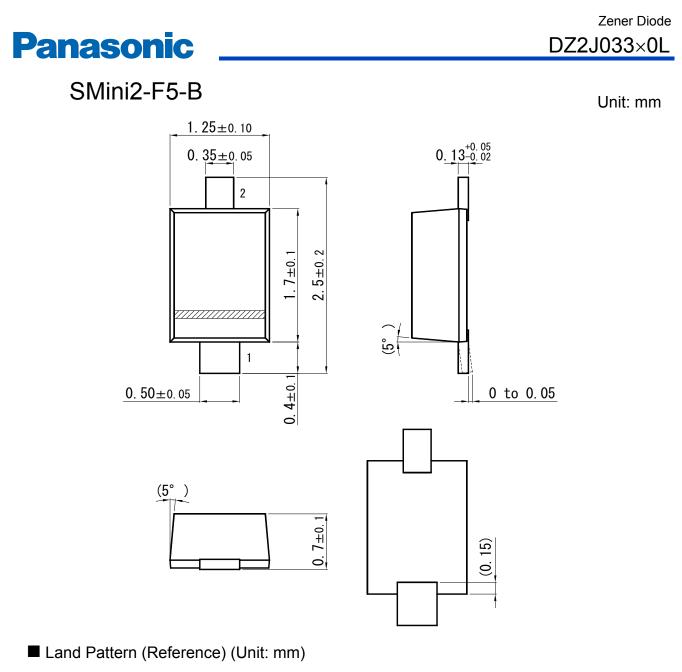
(2) Mounted on glass epoxy print board. Board size : 45 mm × 45 mm x 1 mm

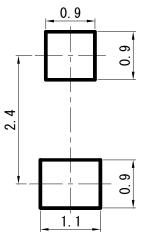
10

100

1000

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Established : 2009-10-14 Revised : 2013-07-01

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