# Panasonic

Zener Diode DZ2S047×0L

## DZ2S047×0L Silicon epitaxial planar type

## For constant voltage / For surge absorption circuit DZ2J047 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: AJ or AU

#### Packaging

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

■ Absolute Maximum Ratings Ta = 25 °C					
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		

 
 Storage temperature
 Tstg
 -55 to
 +150
 °C

 Note)
 \*1
 Mounted on glass epoxy print board ( 45 mm × 45 mm × 1 mm ) Solder in ( 0.8 mm × 0.6 mm )
 Solder in ( 0.8 mm × 0.6 mm )

\*2 Test method : IEC61000\_4\_2

(C = 150 pF, R = 330  $\Omega$ , Contact discharge : 10 times )

#### ■ Electrical Characteristics Ta = 25 °C ± 3 °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	4.47		4.94	V
Zener operating resistance	RZ	IZ = 5 mA			80	Ω
Zener rise operating resistance	RZK	IZ = 1 mA			800	Ω
Reverse current	IR	VR = 1 V			2.0	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		0.5		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.

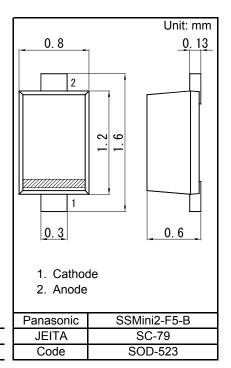
3. \*1 The temperature must be controlled 25 °C for VZ mesurement.

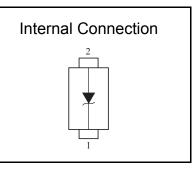
VZ value measured at other temperature must be adjusted to VZ (25 °C).

\*2 VZ guaranted 20 ms after current flow Rank classification

*3	Tj = 25 °C to 150 °C	
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k classification						
Code	М		0			
Rank	М			No-rank		
VZ	4.59	to	4.83	4.47	to	4.94
Marking symbol	AU			AJ		

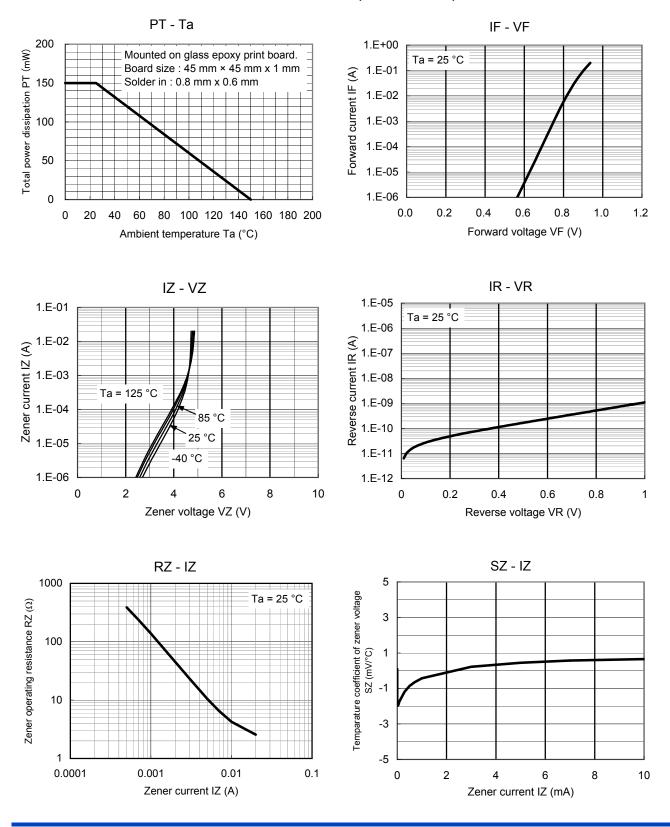






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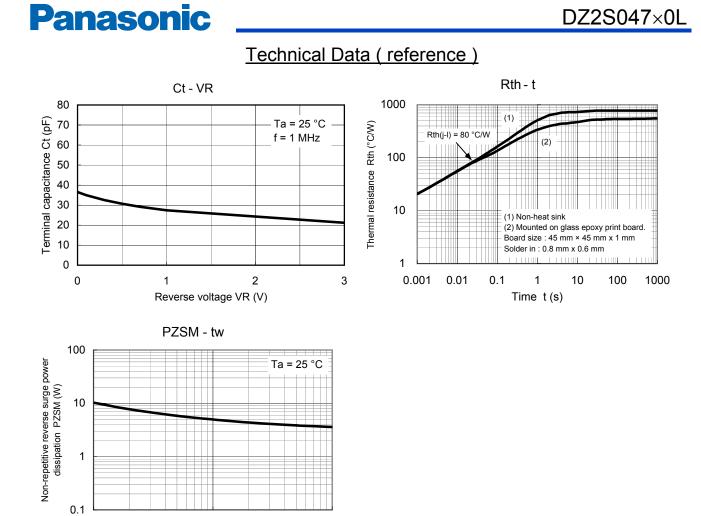
## Technical Data (reference)



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Established : 2009-11-09 Revised : 2013-07-22

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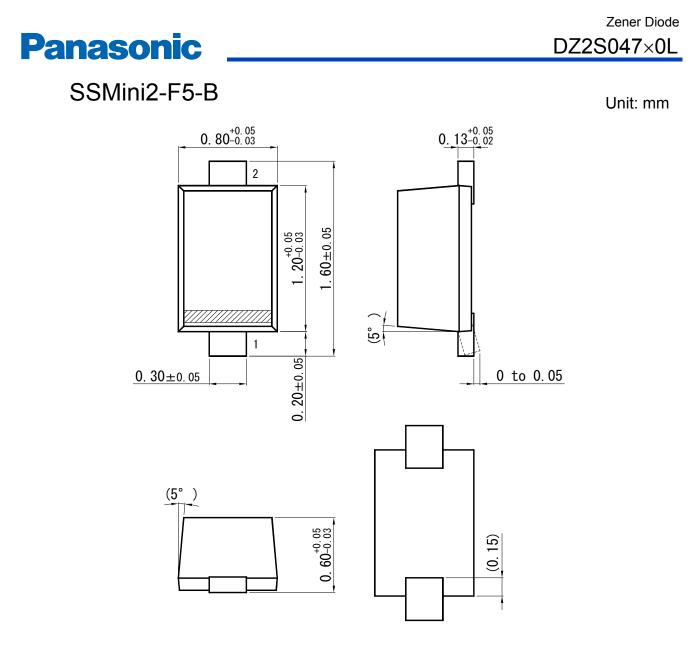


10000

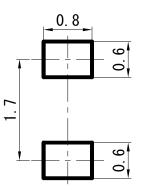
100

1000

Pulse width tw (µs)



Land Pattern (Reference) (Unit: mm)



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