TVS Diode

#### DY2S6Z000L

## **Panasonic**

### DY2S6Z000L

### Silicon epitaxial planar type

#### For ESD protection and transient voltage suppressor

#### ■ Features

- IEC 61000-4-2 (ESD) ±8 kV (contact) / ±15 kV (air)
- Low Clamping Voltage
- Low Capacitance
- · Low Leak Current
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: AV

#### Packaging

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

#### ■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Total power dissipation *1	PT	150	mW
Forward current	IF	100	mA
Electrostatic discharge *2	ESD	±8	kV
Electrostatic discharge *3	ESD	±15	kV
Peak pulse power *4	Ppp	47	W
Peak pulse current *4	Ipp	2.8	Α
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

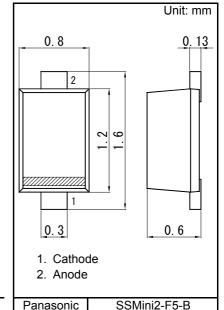
Note: \*1 Mounted on glass epoxy print board. ( 45 mm x 45 mm x 1 mm ) Solder in. ( 0.8 mm x 0.6 mm )

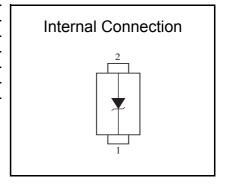
- \*2 Test method:IEC61000\_4\_2
  - (C = 150 pF,R = 330  $\Omega$ , contact discharge:10 times)
- \*3 Test method:IEC61000\_4\_2 (C = 150 pF,R = 330  $\Omega$ , air discharge:10 times)
- \*4 Test method:IEC61000\_4\_5 ( tp =  $8/20\mu s$ , Unrepeated )

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 10mA			1.0	V
Reverse stand-off voltage	VRWM				6.0	V
Reverse breakdown voltage *1,*2	VBR	IR = 5mA	7.79	8.2	8.61	V
Reverse current	IR	VR = 6V			0.05	μΑ
Clamping voltage *3	Vc	Ipp = 2.8A, tp = $8/20 \mu s$			19.3	V
Terminal capacitance	Ct	VR = 0 V, f = 1 MHz		24		pF

- 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 VBR mesurement. VBR value measured at other temperature must be adjusted to VBR (25°C)
    - \*2 VBR guaranted 20 ms after current flow.
    - \*3  $8\mu s \times 20\mu s$  Pulse Waveform

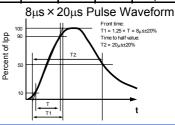




SC-79 SOD-523

JEITA

Code



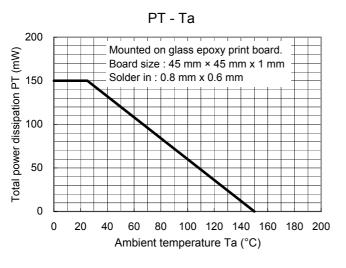
Page 1 of 3

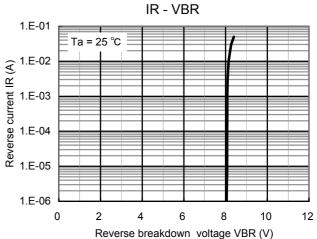
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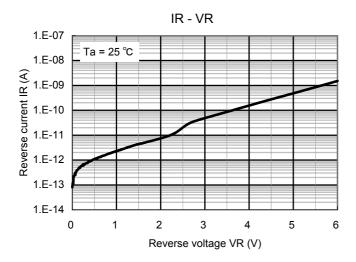
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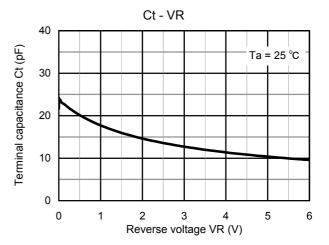
## DY2S6Z000L

## Technical Data (reference)









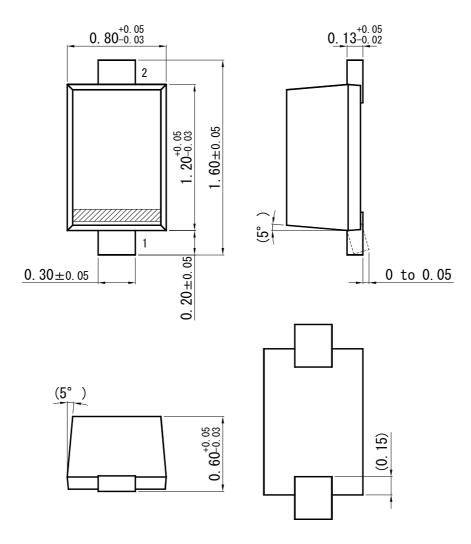
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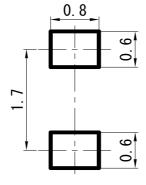
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SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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