# **DZ24330**

## Silicon epitaxial planar type

For constant voltage / For surge absorption circuit Capability of withstanding a high surge type DZ2W330 in Power type package

#### ■ Features

- Excellent rising characteristics of zener current IZ
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant
   (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

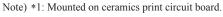
#### ■ Marking Symbol: HG

### Packaging

DZ2433000L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Forward current	$I_{F}$	400	mA
Repetitive peak forward current	I <sub>FRM</sub>	500	mA
Total power dissipation *1	P <sub>T</sub>	2	W
Non-repetitive reverse surge power dissipation *2	P <sub>ZSM</sub>	100	W
Electrostatic discharge *3	ESD	±30	kV
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C



Board size:  $50 \text{ mm} \times 50 \text{ mm}$ , Board thickness: 0.8 mm, Soldering size:  $2 \text{ mm} \times 2 \text{ mm}$ 

### ■ Electrical Characteristics $T_a = 25$ °C±3°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	$I_F = 200 \text{ mA}$			1.2	V
Zener voltage *1,2	$V_Z$	$I_Z = 10 \text{ mA}$	31.35	33.00	34.65	V
Zener operating resistance	$R_Z$	$I_Z = 10 \text{ mA}$			30	Ω
Reverse current	$I_R$	$V_R = 26.4 \text{ V}$			10	μΑ
Temperature coefficient of zener voltage *3	$S_Z$	$I_Z = 10 \text{ mA}$		34.0		mV/°C

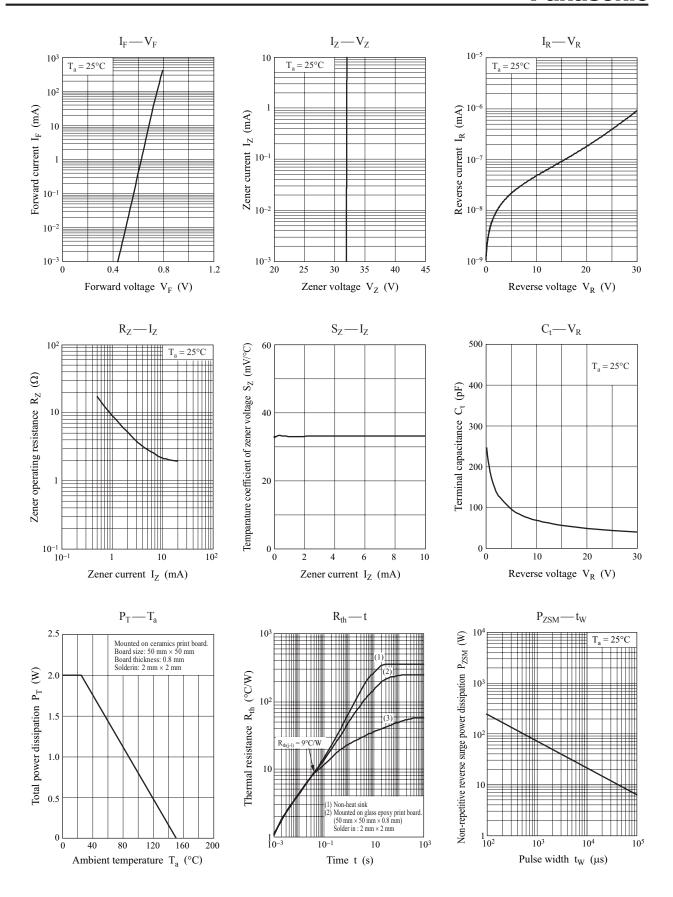
 $Note) \ 1. \ Measuring \ methods \ are \ based \ on \ JAPANESE \ INDUSTRIAL \ STANDARD \ JIS \ C \ 7031 \ measuring \ methods \ for \ diodes.$ 

- 2. Absolute frequency of input and output is 5 MHz.
- 3. \*1: The temperature must be controlled 25°C for  $V_Z$  measurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C)
  - \*2:  $V_Z$  guaranteed 20 ms after current flow.
  - \*3:  $T_i = 25^{\circ}C$  to  $150^{\circ}C$

	Unit: mm				
2.4	3.8				
1: Cathode					
2: Anode					
Panasonic	TMiniP2-F2-B				
JEITA	SC-110A				
Code	_				

<sup>\*2:</sup> t = 0.1 ms

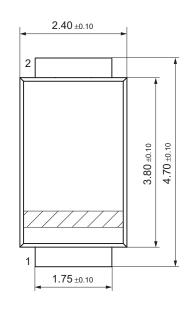
<sup>\*3:</sup> Test method:IEC61000-4-2 (C = 150 pF, R = 330  $\Omega$ , Contact discharge:10 times)

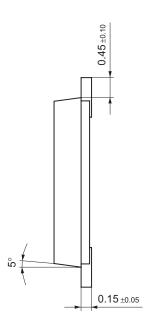


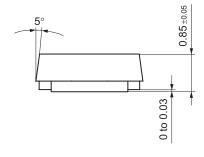
2 Ver. DED

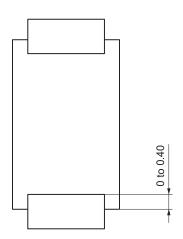
TMiniP2-F2-B

Unit: mm

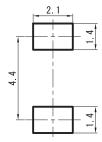








## ■ Land Pattern (Reference) (Unit: mm)



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