## Panasonic

## DY2L4A0C0L1

Silicon epitaxial planar type

For bidirectional ESD protection and transient voltage suppressor

- Features
- IEC 61000-4-2 (ESD) $\pm 15 \mathrm{kV}$ (air and contact)
- Low clamping voltage
- Low capacitance
- Low leak current
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
■ Marking Symbol: F3
Packaging
Embossed type (Thermo-compression sealing) : 1000 pcs / reel (standard)

Absolute Maximum Ratings $\mathrm{Ta}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| Total power dissipation $^{* 1}$ | PT | 100 | mW |
| Electrostatic discharge $^{* 2}$ | ESD | $\pm 15$ | kV |
| Peak pulse power $^{* 3}$ | Ppp | 21 | W |
| Peak pulse current $^{* 3}$ | Ipp | 2.1 | A |
| Junction temperature $^{\text {Operating ambient temperature }}$ | Tj | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature | Topr | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |

Note: *1 Mounted on FR4 board. ( $25.4 \mathrm{~mm} \times 25.4 \mathrm{~mm} \times 1.0 \mathrm{~mm}$ )
*2 Test method:IEC61000-4-2
( $\mathrm{C}=150 \mathrm{pF}, \mathrm{R}=330 \Omega$, Contact and Air discharge:10 times)
*3 Test method:IEC61000-4-5 (tp $=8 / 20 \mu \mathrm{~s}$, Unrepeated)


Electrical Characteristics $\mathrm{Ta}=25^{\circ} \mathrm{C} \pm 3^{\circ} \mathrm{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: |
| Reverse stand-off voltage | VRWM | - |  |  | 4.0 | V |
| Reverse breakdown voltage ${ }^{*, *}{ }^{*}$ | VBR | $\mathrm{IR}=5 \mathrm{~mA}$ | 6.42 | 6.90 | 7.38 | V |
| Reverse current | IR | $\mathrm{VR}=4 \mathrm{~V}$ |  |  | 50 | nA |
| Clamping voltage ${ }^{* 3}$ | Vc | $\mathrm{Ipp}=2.1 \mathrm{~A}, \mathrm{tp}=8 / 20 \mu \mathrm{~s}$ |  |  | 12 | V |
| Terminal capacitance | Ct | $\mathrm{VR}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  | 6.5 | 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 $25^{\circ} \mathrm{C}$ for VBR mesurement. VBR value measured at other temperature must be adjusted to VBR $\left(25^{\circ} \mathrm{C}\right)$.
*2 VBR guaranted 20 ms after current flow.
*3 $8 \mu \mathrm{~s} / 20 \mu \mathrm{~s}$ Pulse Waveform
$8 \mu \mathrm{~s} / 20 \mu \mathrm{~s}$ Pulse Waveform


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## Technical Data (Reference)





DCSP0603010-N2


Unit: mm

Unit: mm
0.3


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