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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# DY2L3A0C0L1

## Silicon epitaxial planar type

For bidirectional ESD protection and transient voltage suppressor

### ■ Features

- IEC 61000-4-2 (ESD) ±15kV (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: F1

### ■ Packaging

Embossed type (Thermo-compression sealing) : 1 000 pcs / reel (standard)

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

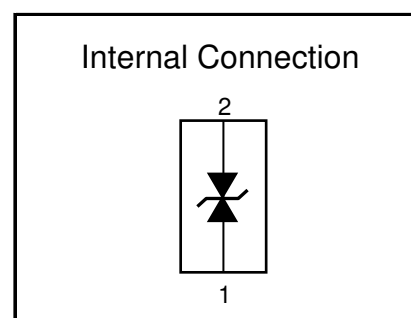
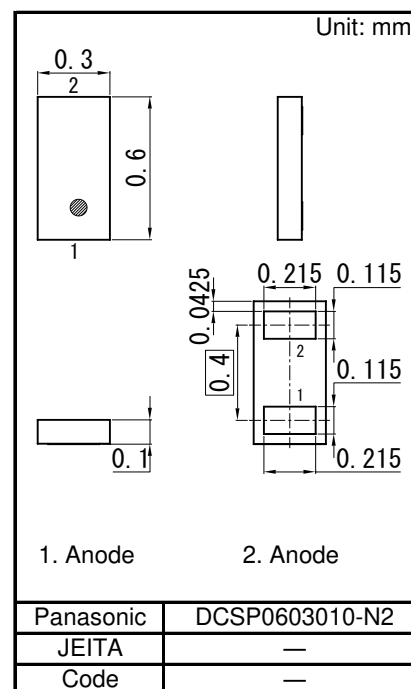
Parameter	Symbol	Rating	Unit
Total power dissipation <sup>*1</sup>	PT	100	mW
Electrostatic discharge <sup>*2</sup>	ESD	±15	kV
Peak pulse power <sup>*3</sup>	Ppp	23	W
Peak pulse current <sup>*3</sup>	Ipp	2.6	A
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

Note: \*1 Mounted on FR4 board. (25.4 mm x 25.4 mm x 1.0 mm)

\*2 Test method: IEC61000-4-2

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

\*3 Test method: IEC61000-4-5 (tp = 8/20μs, Unrepeated)



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	VRWM	—			3.0	V
Reverse breakdown voltage <sup>*1, *2</sup>	VBR	IR = 5 mA	5.39	5.80	6.21	V
Reverse current	IR	VR = 3 V			10	μA
Clamping voltage <sup>*3</sup>	Vc	Ipp = 2.6 A, tp = 8/20 μs			10	V
Terminal capacitance	Ct	VR = 0 V, f = 1 MHz		8.5		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.

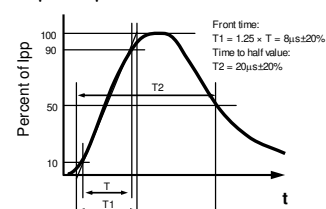
3. \*1 The temperature must be controlled 25°C for VBR measurement.

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

\*2 VBR guaranteed 20 ms after current flow.

\*3 8μs/20μs Pulse Waveform

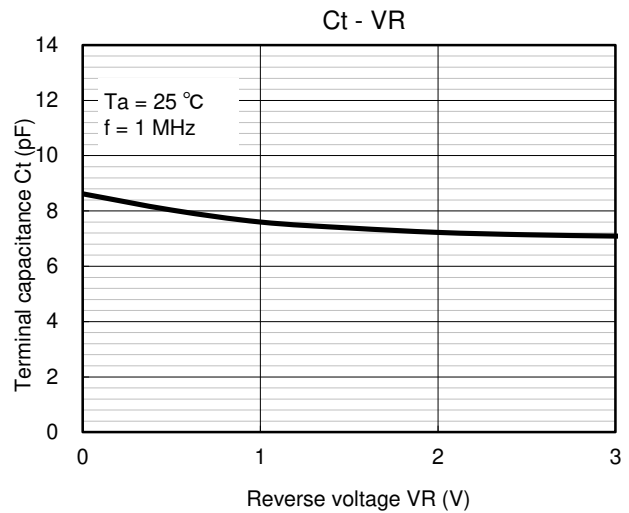
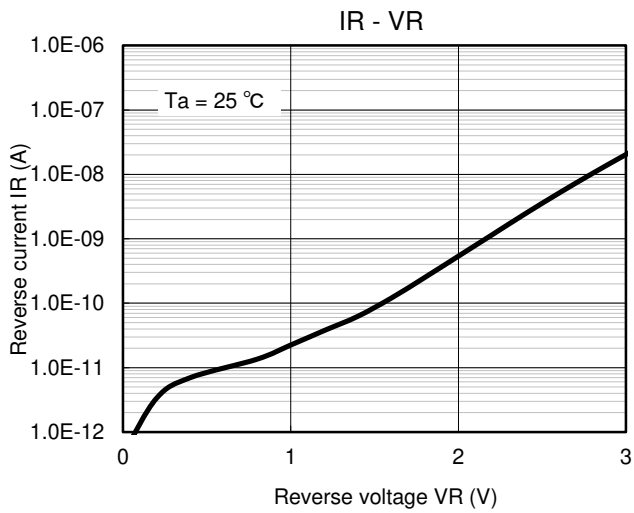
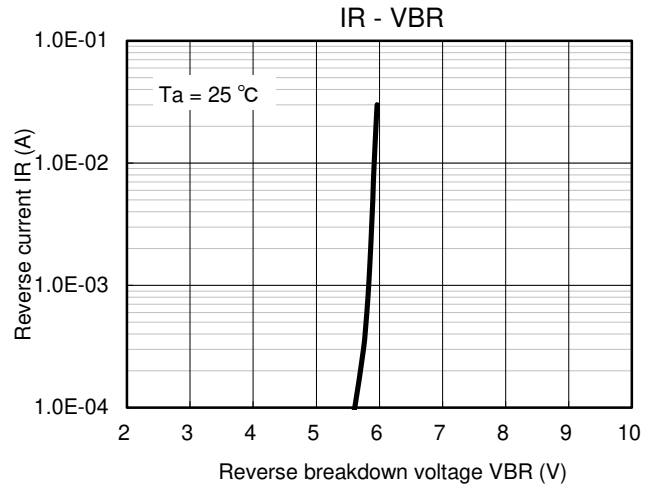
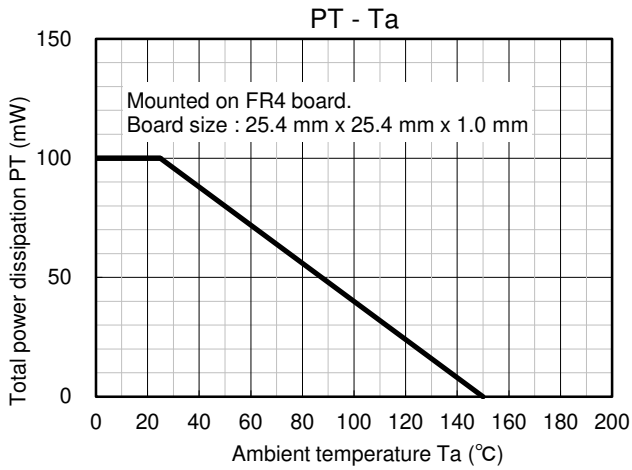
8μs/20μs Pulse Waveform





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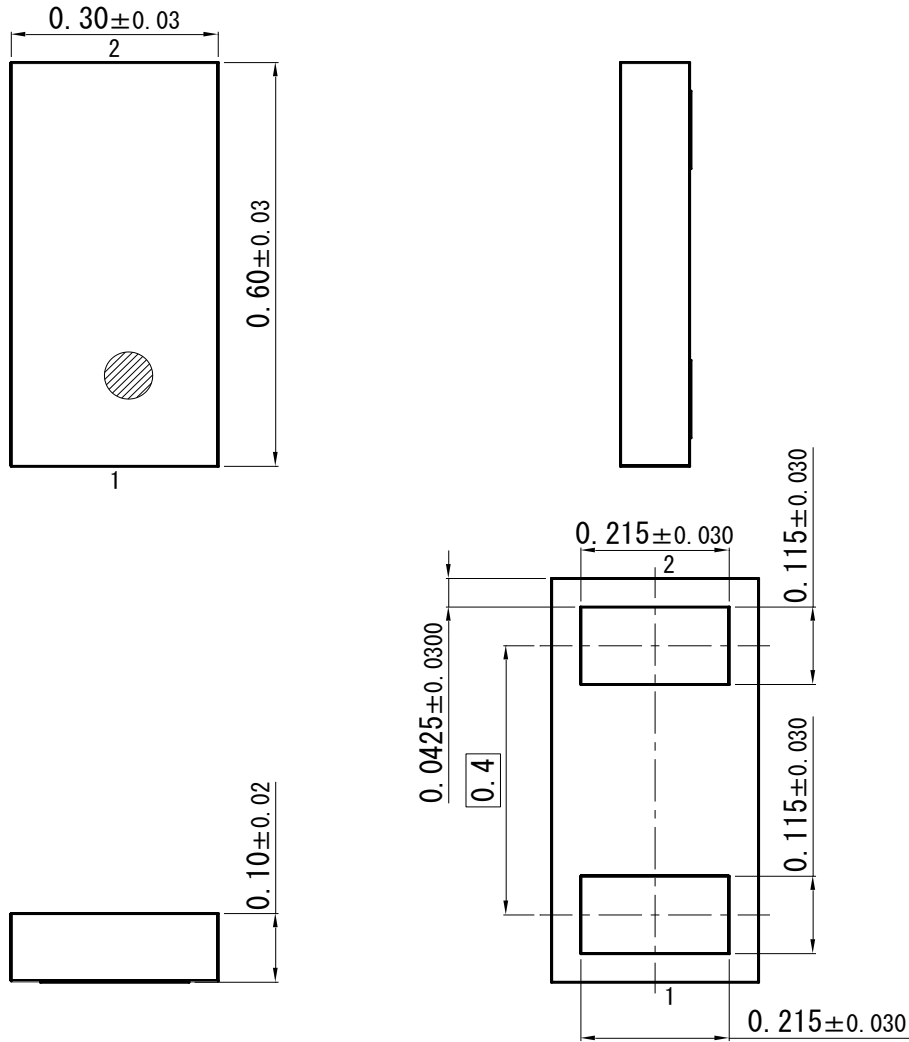
Technical Data (Reference)





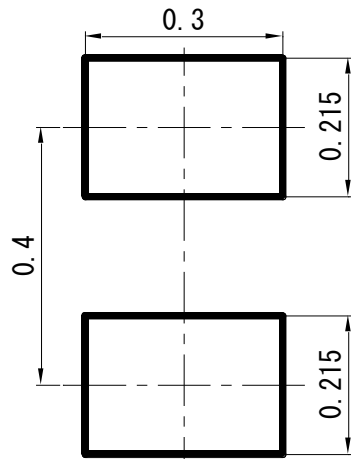
DY2L DCSP0603010-N2

Unit: mm



■ Land Pattern (Reference)

Unit: mm



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