



DY2L5A0C0L1

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: F4

■ Packaging

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

■ Absolute Maximum Ratings Ta = 25 °C

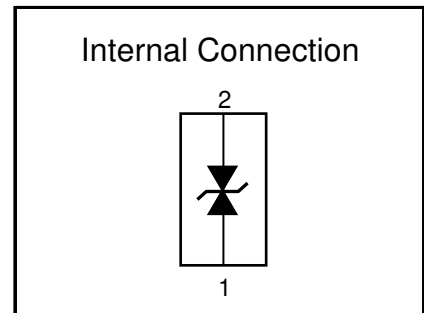
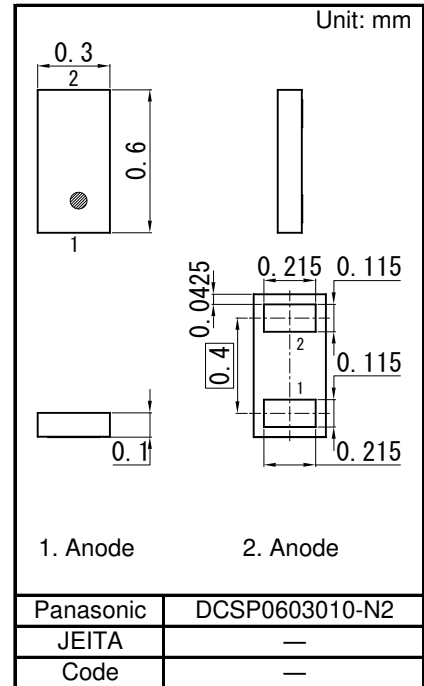
Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	100	mW
Electrostatic discharge ^{*2}	ESD	±15	kV
Peak pulse power ^{*3}	Ppp	20	W
Peak pulse current ^{*3}	Ipp	1.8	A
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

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	—			5.0	V
Reverse breakdown voltage ^{*1, *2}	VBR	IR = 5 mA	7.0	7.5	8.0	V
Reverse current	IR	VR = 5 V			50	nA
Clamping voltage ^{*3}	Vc	Ipp = 1.8 A, tp = 8/20 μs			13	V
Terminal capacitance	Ct	VR = 0 V, f = 1 MHz		6.0		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.

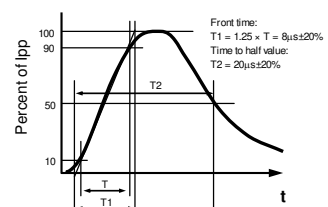
3. *1 The temperature must be controlled 25°C for VBR measurement.

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

*2 VBR guaranteed 20 ms after current flow.

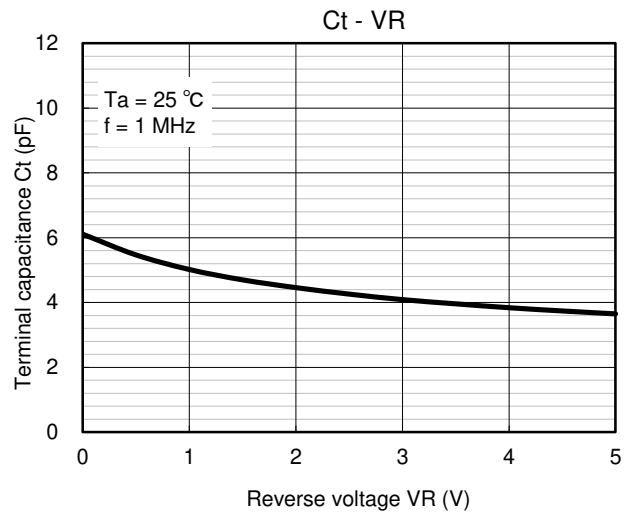
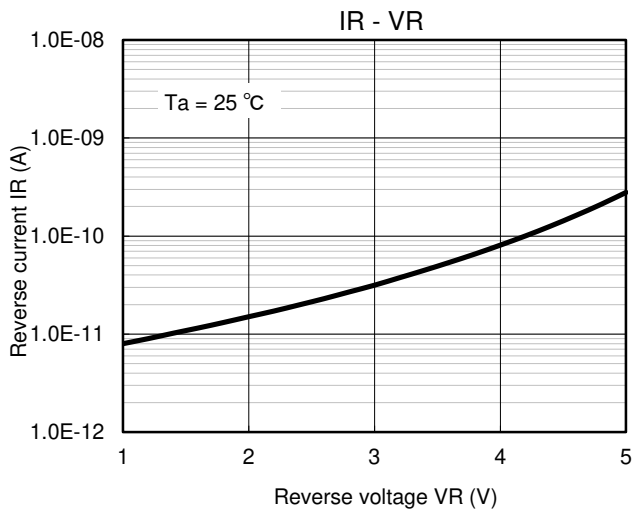
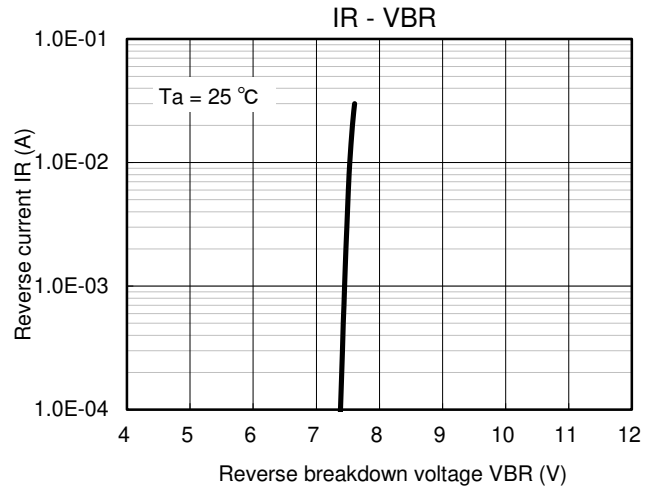
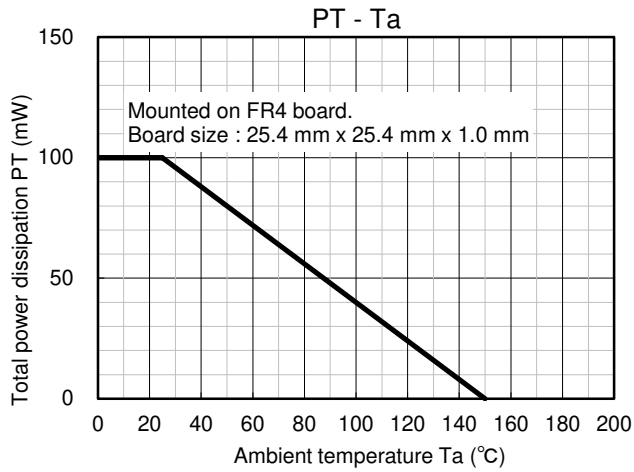
*3 8μs/20μs Pulse Waveform

8μs/20μs Pulse Waveform





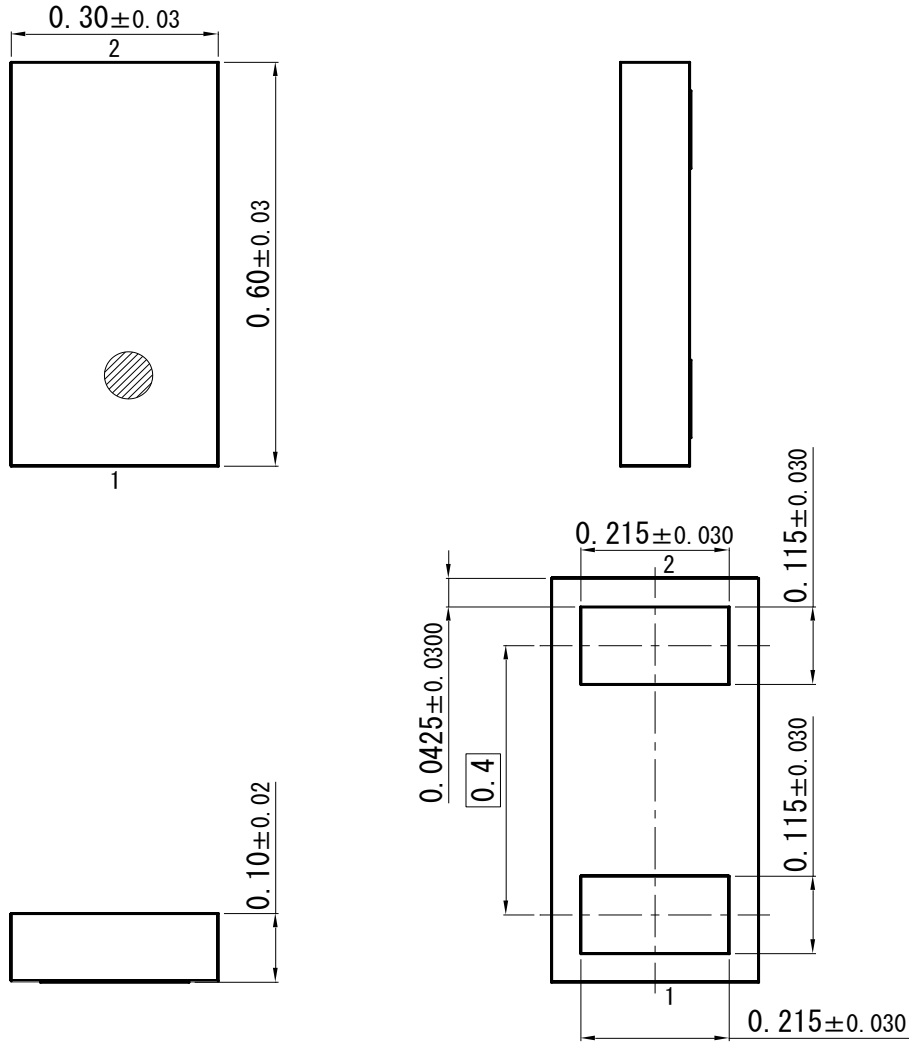
Technical Data (Reference)





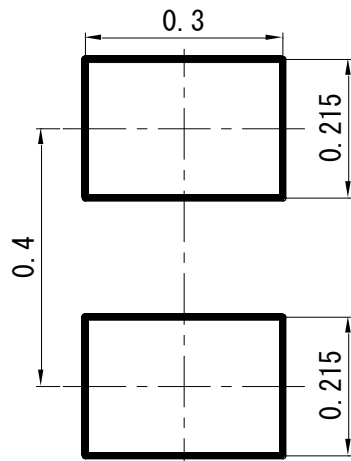
DCSP0603010-N2

Unit: mm



■ Land Pattern (Reference)

Unit: mm



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