TVS Diode

Panasonic

DY2L3A0C0L1

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Silicon epitaxial planar type

For bidirectional ESD protection and transient voltage suppressor

■ Features

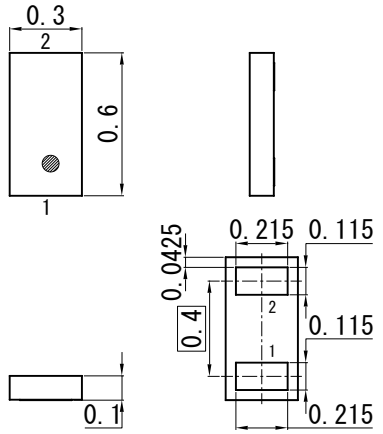
- IEC 61000-4-2 (ESD) ±15kV (air and contact)
- Low clamping voltage
- Low capacitance
- Low leak current
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: F1

■ Packaging

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

Unit: mm



1. Anode 2. Anode

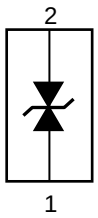
Panasonic	DCSP0603010-N2
JEITA	—
Code	—

■ 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	23	W
Peak pulse current *3	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)

Internal Connection

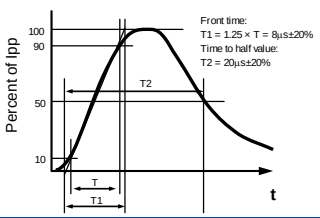


■ Electrical Characteristics Ta = 25 °C ± 3 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	VRWM	—			3.0	V
Reverse breakdown voltage *1, *2	VBR	IR = 5 mA	5.39	5.80	6.21	V
Reverse current	IR	VR = 3 V			10	μA
Clamping voltage *3	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 mesurement.
VBR value measured at other temperature must be adjusted to VBR (25°C).
*2 VBR guaranted 20 ms after current flow.
*3 8μs/20μs Pulse Waveform

8μs/20μs Pulse Waveform



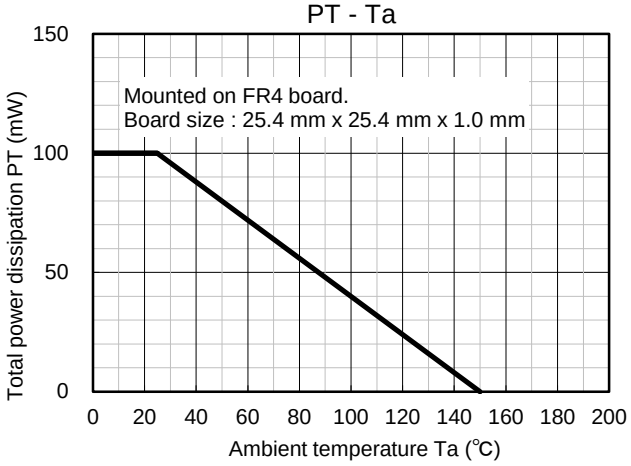
Established : 2015-10-13
Revised : ####-##-##

Panasonic

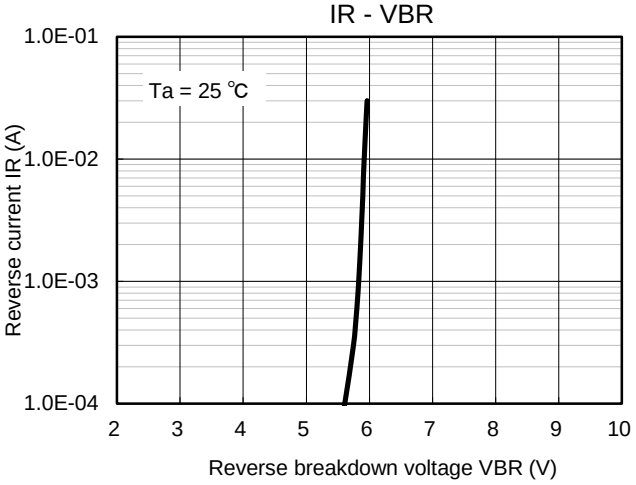
DY2L3A0C0L1

Technical Data (Reference)

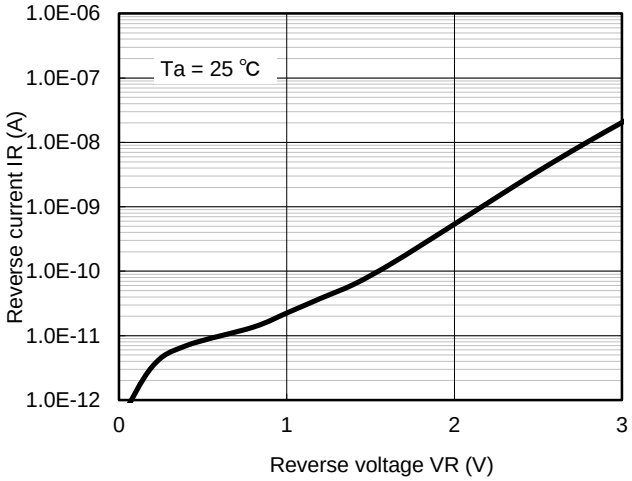
PT - Ta



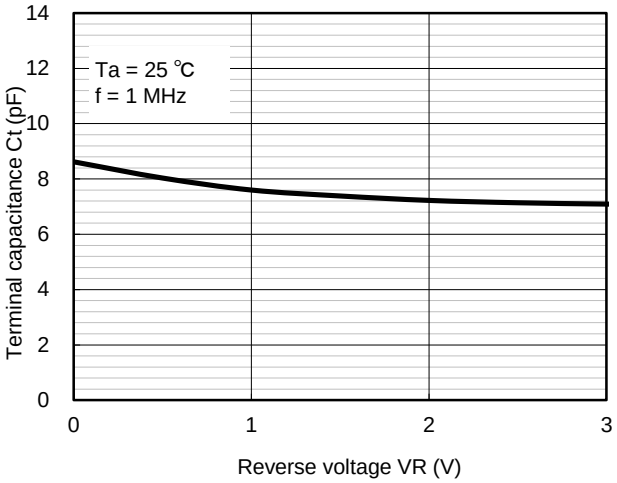
IR - VBR



IR - VR



Ct - VR



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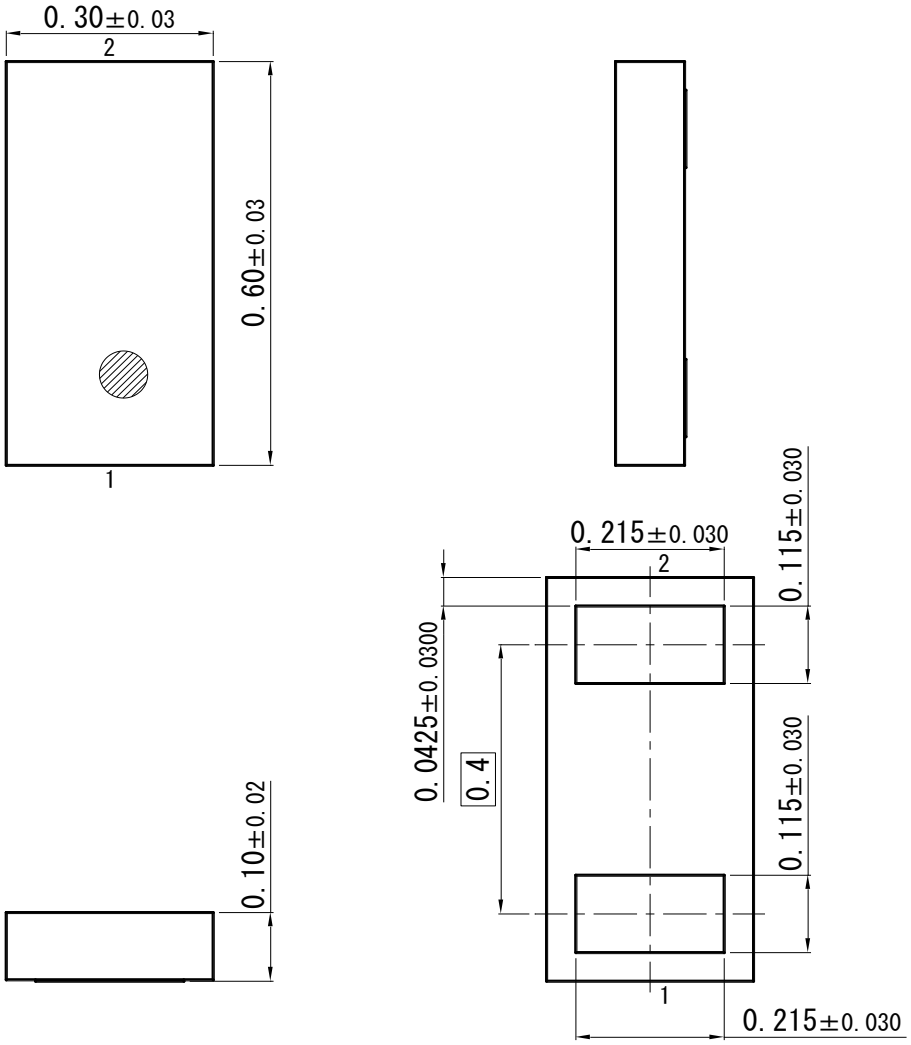
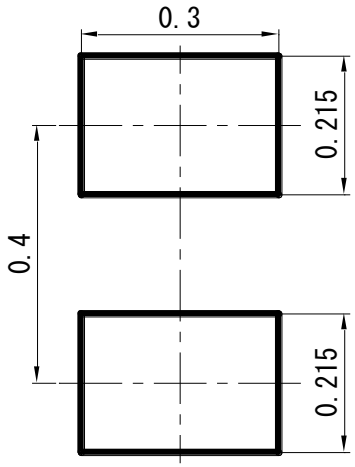
DY2I DCSP0603010-N2

Unit: mm



■ Land Pattern (Reference)

Unit: mm



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