

DIC series

2.54 mm Pitch Connectors

Outline

The DIC series provides various connectors for switching between circuits on PCB in combination with various male connectors, for various-pattern designs.

Features

- Provides various combinations with FFC series and HKP series connectors.
- Available in various thicknesses of contact gold plating for lower cost.
- The insulating material is UL-approved.
- Provides double plug, triple plug, and quadruple plug types.

Principal Applications

Office automation equipment, communications equipment, etc.

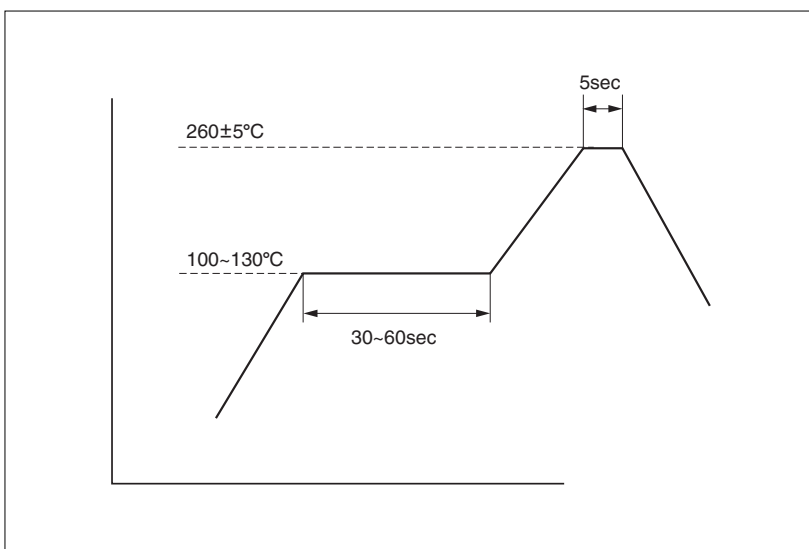
Electrical Characteristics

Part No.	Connector with 0.5 mm diameter round contacts																
	Connector with 0.635x0.635 mm square contacts on 5.08 mm pitch																
	Connector with 0.6x0.4 mm square contacts					Connector with 0.635x0.635 mm square contacts or 0.64 mm diameter round											
	DIC-128	DIC-128A	DIC-129	DIC-129A	DIC-131	DIC-130	DIC-130B	DIC-208	DIC-208B	DIC-252	DIC-367	DIC-407W	DIC-408W	DIC-320	DIC-320A	DIC-406	DIC-348
Rated voltage	125V AC (r.m.s.)																
Rated current	1A																
Insulation resistance	Over 1000 megohms at 500V DC																
Dielectric withstanding voltage	AC 500V					1000V AC (r.m.s.)											
	AC 1000V																
Contact resistance	20 milliohms or less					20 milliohms or less											
	25 milliohms or less (includes the resistance of lead wire)																

Document Disclaimer

- When placing orders with us, minimum order quantities are set for every product.
- Be sure to contact us before starting preliminary design of PCBs using our connectors.
- The specifications and information shown in the catalog are subject to change without notice.

Flow temperature profile (for reference purposes)



The flow temperature profile as shown above is for reference purposes. This profile depends on requirements such as the PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own flow temperature profile.

●Applicable products

DIC-149()-()P [Z-149()-()P]

DIC-152()-()P [Z-152()-()P]

DIC-148() [Z-148()]

DIC-404

DIC-349 [Z-349]

The profile shown in this drawing is applicable only for those products shown above.

Product List



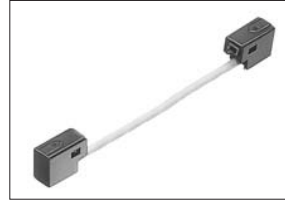
Shunt plug for 0.6×0.4 mm square contacts
DIC-128() [Z-128()]

D-64
DIC series...4



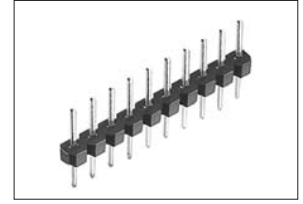
Shunt plug for 0.6×0.4 mm square contacts
DIC-129() [Z-129()]

D-65
DIC series...5



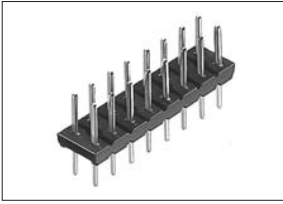
Shunt plug for 0.6×0.4 mm square contacts
DIC-131 [Z-131]

D-66
DIC series...6



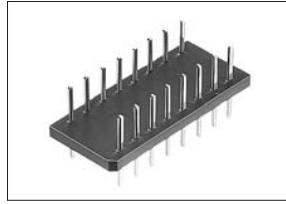
Straight through hole type male connector for PCB
DIC-149()-()P [Z-149()-()P]

D-67
DIC series...7



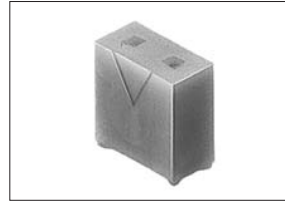
Straight through hole type male connector for PCB
DIC-152()-()P [Z-152()-()P]

D-68
DIC series...8



Straight through hole type male connector for PCB
DIC-148() [Z-148()]

D-69
DIC series...9



Shunt plug for 0.635×0.635 mm square contacts or 0.64 mm diameter round contacts
DIC-130() [Z-130()]

D-70
DIC series...10



Shunt plug for 0.635×0.635 mm square contacts or 0.64 mm diameter round contacts
DIC-252() [Z-252()]

D-71
DIC series...11



Shunt plug for 0.635×0.635 mm square contacts or 0.64 mm diameter round contacts (High profile type)
DIC-208() [Z-208()]

D-73
DIC series...13



Shunt plug for 0.635×0.635 mm square contacts or 0.64 mm diameter round contacts (Double plug type)
DIC-407W

D-75
DIC series...15



Shunt plug for 0.635×0.635 mm square contacts or 0.64 mm diameter round contacts (Triple plug type)
DIC-408W

D-76
DIC series...16



Shunt plug for 0.635×0.635 mm square contacts and 5.08 mm pitch connectors (High profile type)
DIC-406

D-77
DIC series...17



Straight through hole type male connector for PCB
DIC-404

D-78
DIC series...18

Shunt plug for 0.6×0.4 mm square contacts
DIC-128() [Z-128()]

For shunt

0.6×0.4 mm square contacts

RoHS

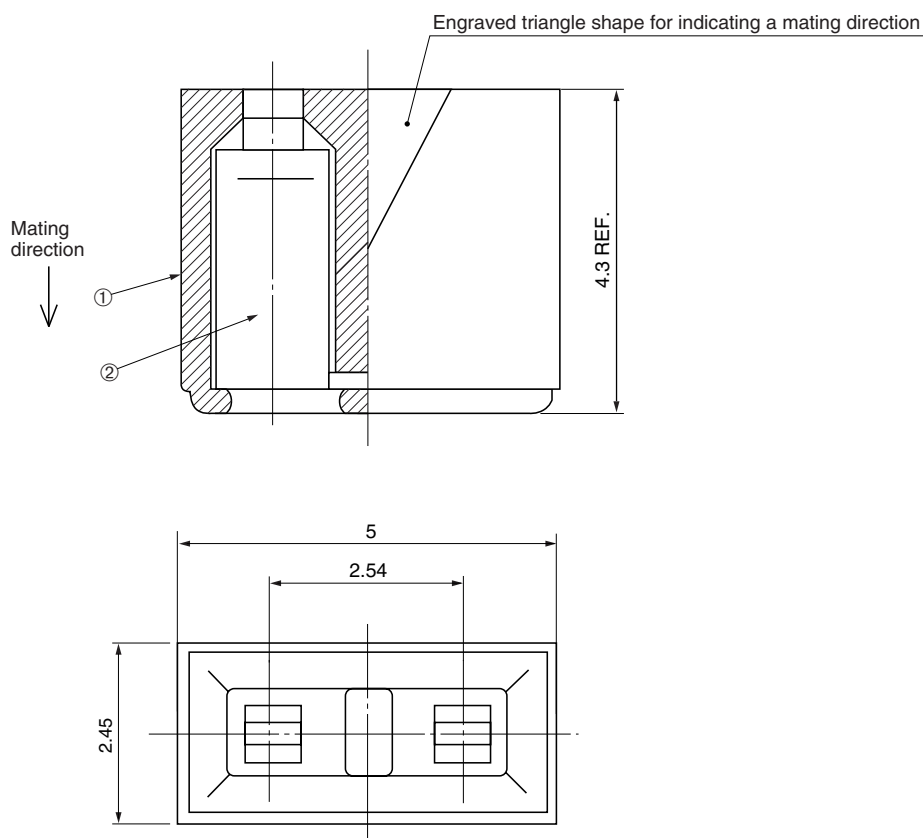


● Configuration of product Part No.

DIC-128 ()

① ②

- ① Series name
- ② Contact plating
Blank: Min. 0.7 μm Gold plate
A : Min. 0.4 μm Gold plate
C : Min. 0.76 μm Gold plate



● Components

①	Insulator
②	Contact

Mating connectors: DIC series Straight through hole type male connector for PCB

Shunt plug for 0.6×0.4 mm square contacts DIC-129() [Z-129()]

2.54 mm pitch connectors

7.62 mm pitch (2.54 mm pitch×3)

For shunt

RoHS

0.6×0.4 mm square contacts

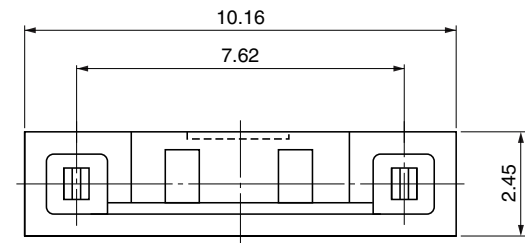
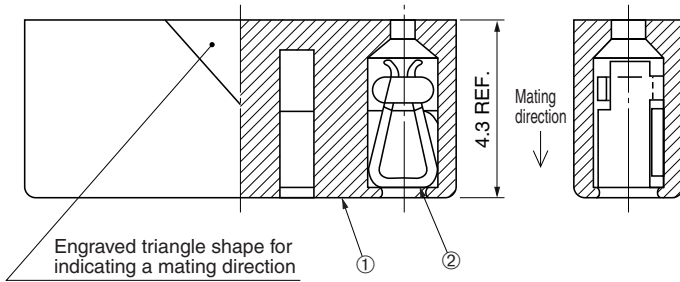


● Configuration of product Part No.

DIC-129 ()

① ②

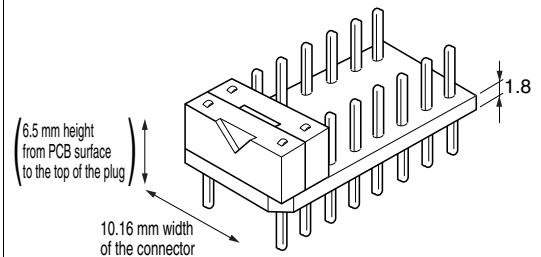
- ① Series name
- ② Contact plating
Blank: Min. 0.7 μm Gold plate
A : Min. 0.4 μm Gold plate
C : Min. 0.76 μm Gold plate



● Components

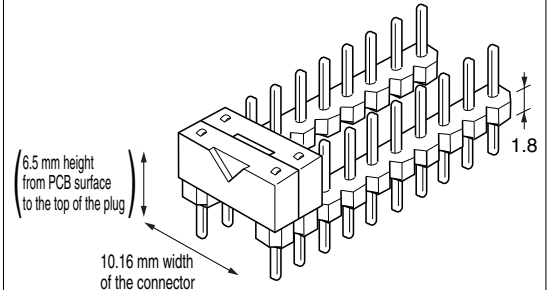
①	Insulator
②	Contact

• Shunt plug DIC-129 • Male connector DIC-148



- The male connector is 16-contact type.
- The above dimensions for height, width and depth are the same as for 16-pin IC connectors.

• Shunt plug DIC-129 • Male connector DIC-148



- When requiring 18 contacts or more, use this connector.
- The male connector has 24 contacts in a row.
- Be careful to avoid contact misalignment due to the slant of the connector.

Mating connectors: DIC series Straight through hole type male connector for PCB

Shunt plug for 0.6×0.4 mm square contacts DIC-131[Z-131]

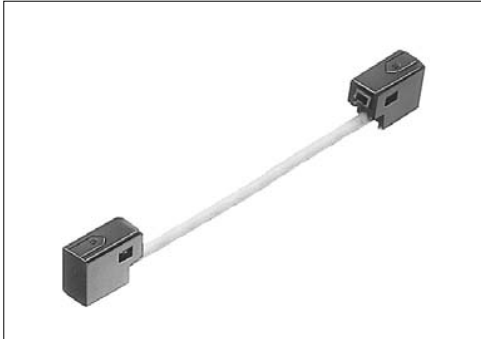
2.54 mm pitch connectors

For shunt

0.6×0.4 mm square contacts

With lead wire

RoHS

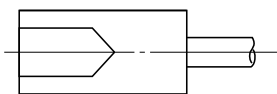
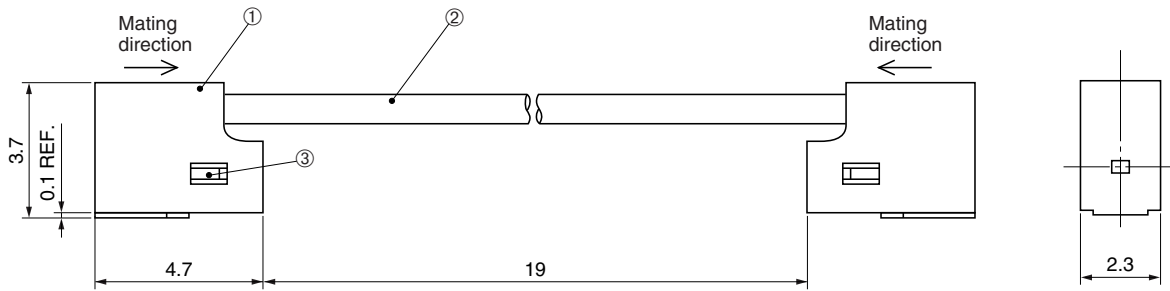


● Configuration of product Part No.

DIC-131

①

- ① Series name
Contact plating: Min. 0.5 μm Gold plate



• Shunt plug DIC-131 • Male connector DIC-148



This skew angle is not allowed to exceed 8 degrees.

Be careful not to insert the contact into this lead wire exit.

This plug cannot be mated with the male connector in this direction.

(6.5 mm height from PCB surface to the top of the plug)

10.16 mm width of the connector

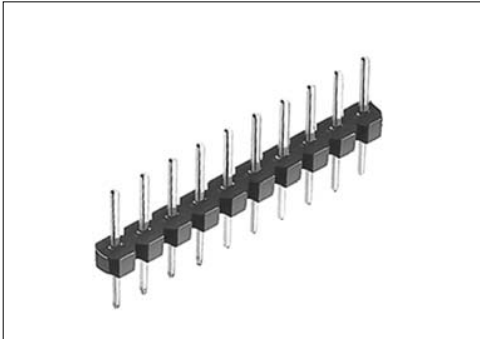
- Prepare the arrangement of lead wires to prevent the skew of shunt plugs before mating these plugs with the male connector.
- The lead wire should be laid down onto the platform floor of the male connector, or kept lower than the top of the plugs, so that they are out of the way when pulling out the male connector platform that these plugs are mating with.
- Never yank the lead wire to disconnect the plug from the male connector, or else damage to the male connector may result.
- As shown above, there is a direction that the plug cannot be inserted onto the male connector.

● Components

①	Insulator
②	Lead wire
③	Contact

Mating connectors: DIC series Straight through hole type male connector for PCB

Straight through hole type male connector for PCB
DIC-149()-()P[Z-149()-()P]

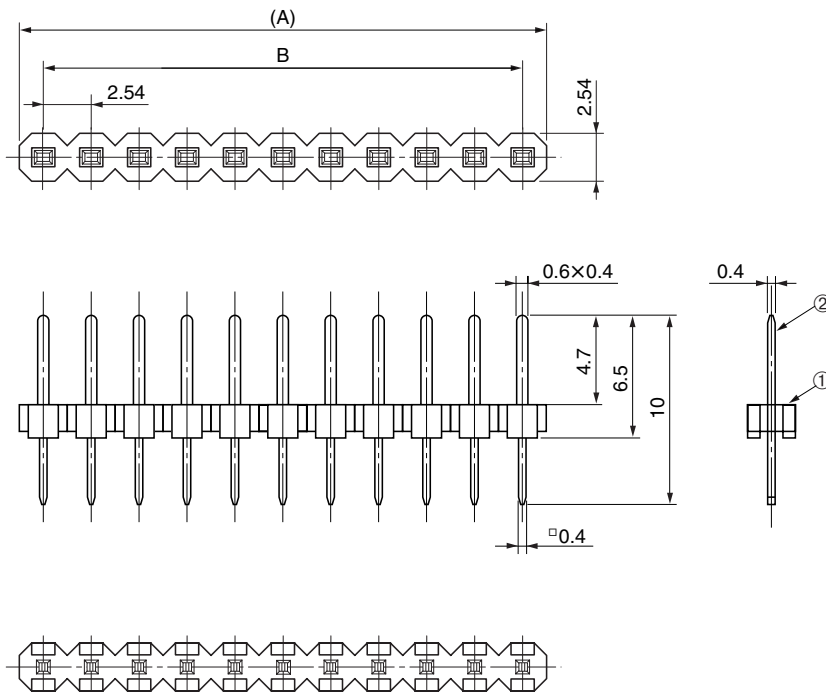


● Configuration of product Part No.

DIC-149 ()- ()P

① ② ③

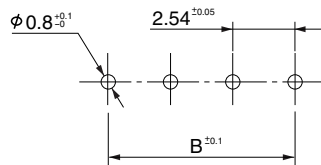
- ① Series name
- ② Contact plating
 Blank: Min. 0.7 μm Gold plate
 A : Min. 0.4 μm Gold plate
 B : Min. 0.2 μm Gold plate
 C : Min. 0.76 μm Gold plate
 E : Min. 0.1 μm Gold plate
- ③ No. of contacts: 1–24



● Dimensions

Part No.	A	B
DIC-149()-1P	2.54	-
DIC-149()-2P	5.08	2.54
DIC-149()-3P	7.62	5.08
DIC-149()-4P	10.16	7.62
DIC-149()-5P	12.70	10.16
DIC-149()-6P	15.24	12.70
DIC-149()-7P	17.78	15.24
DIC-149()-8P	20.32	17.78
DIC-149()-9P	22.86	20.32
DIC-149()-10P	25.40	22.86
DIC-149()-11P	27.94	25.40
DIC-149()-12P	30.48	27.94
DIC-149()-13P	33.02	30.48
DIC-149()-14P	35.56	33.02
DIC-149()-15P	38.10	35.56
DIC-149()-16P	40.64	38.10
DIC-149()-17P	43.18	40.64
DIC-149()-18P	45.72	43.18
DIC-149()-19P	48.26	45.72
DIC-149()-20P	50.80	48.26
DIC-149()-21P	53.34	50.80
DIC-149()-22P	55.88	53.34
DIC-149()-23P	58.42	55.88
DIC-149()-24P	60.96	58.42

Since these products are supplied to customers by cutting off to the specified number of contacts, both sides of the insulator may have cutaway surfaces.



Recommended PCB layout

● Components

①	Insulator
②	Contact

Mating connectors: DIC series Shunt plug for 0.6×0.4 mm square contact

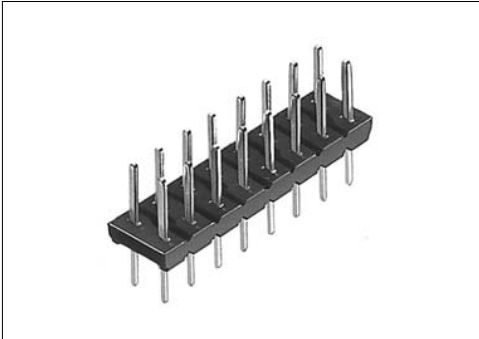
Straight through hole type male connector for PCB
DIC-152()-()P[Z-152()-()P]

For PCB

Straight Through hole

RoHS

0.6×0.4 mm square contacts

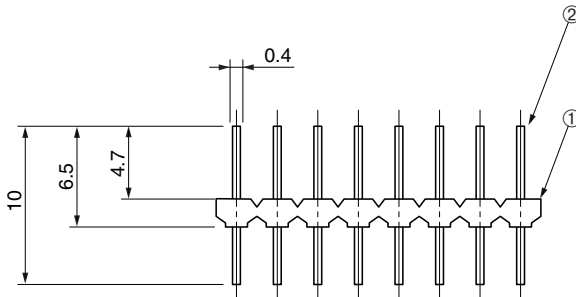
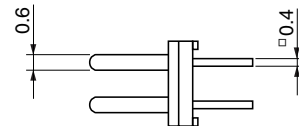
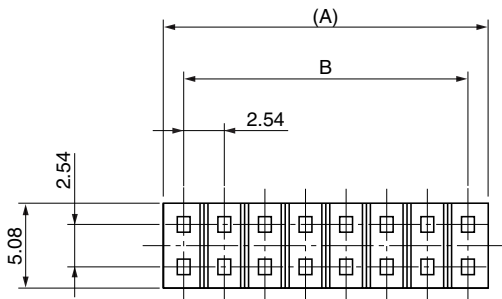


● Configuration of product Part No.

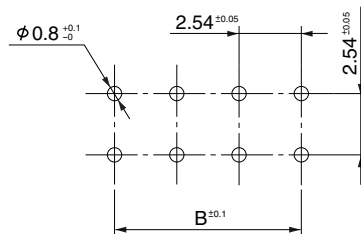
DIC-152 ()-()P

① ② ③

- ① Series name
- ② Contact plating
 Blank: Min. 0.7 μm Gold plate
 A : Min. 0.4 μm Gold plate
 B : Min. 0.2 μm Gold plate
 C : Min. 0.76 μm Gold plate
- ③ No. of contacts: 2–20



Since these products are supplied to customers by cutting off to the specified number of contacts, both sides of the insulator may have cutaway surfaces.



Recommended PCB layout

● Components

①	Insulator
②	Contact

● Dimensions

Part No.	A	B
DIC-152()-2P	2.54	-
DIC-152()-4P	5.08	2.54
DIC-152()-6P	7.62	5.08
DIC-152()-8P	10.16	7.62
DIC-152()-10P	12.70	10.16
DIC-152()-12P	15.24	12.70
DIC-152()-14P	17.78	15.24
DIC-152()-16P	20.32	17.78
DIC-152()-18P	22.86	20.32
DIC-152()-20P	25.40	22.86

Mating connectors: DIC series Shunt plug for 0.6×0.4 mm square contact

Straight through hole type male connector for PCB
DIC-148() [Z-148()]

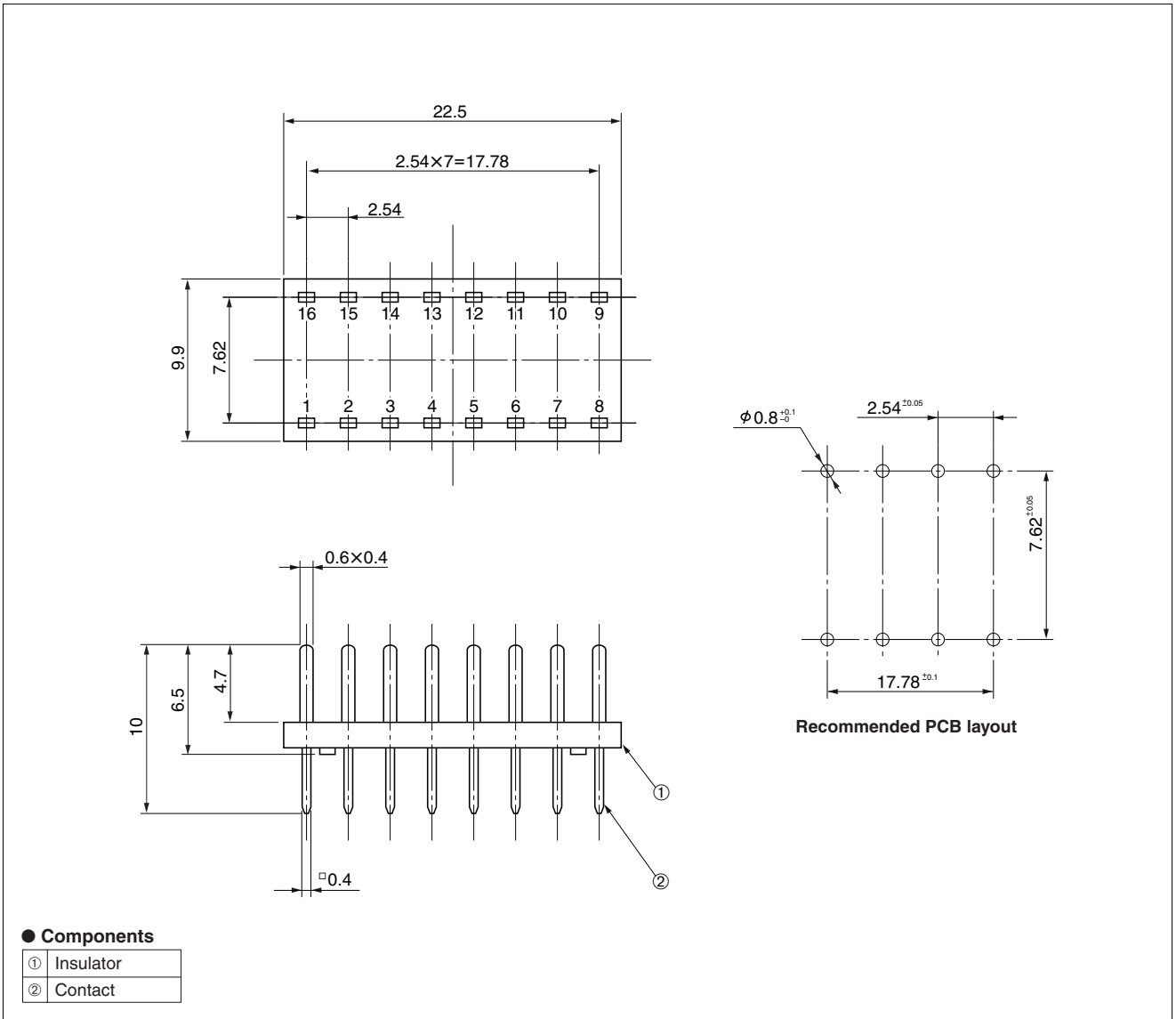


● Configuration of product Part No.

DIC-148 ()

① ②

- ① Series name
- ② Contact plating
 - Blank: Min. 0.7 μm Gold plate
 - A : Min. 0.4 μm Gold plate
 - B : Min. 0.2 μm Gold plate
 - C : Min. 0.76 μm Gold plate



● Components

①	Insulator
②	Contact

Mating connectors: DIC series Shunt plug for 0.6×0.4 mm square contact

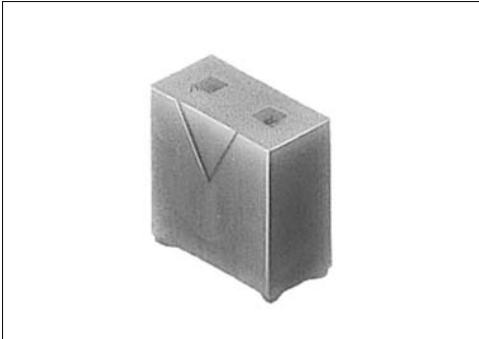
Shunt plug for 0.635×0.635 mm square contacts
or 0.64 mm diameter round contacts
DIC-130() [Z-130()]

For shunt

For 0.635×0.635 mm square contacts

RoHS

or 0.64 mm diameter round contacts

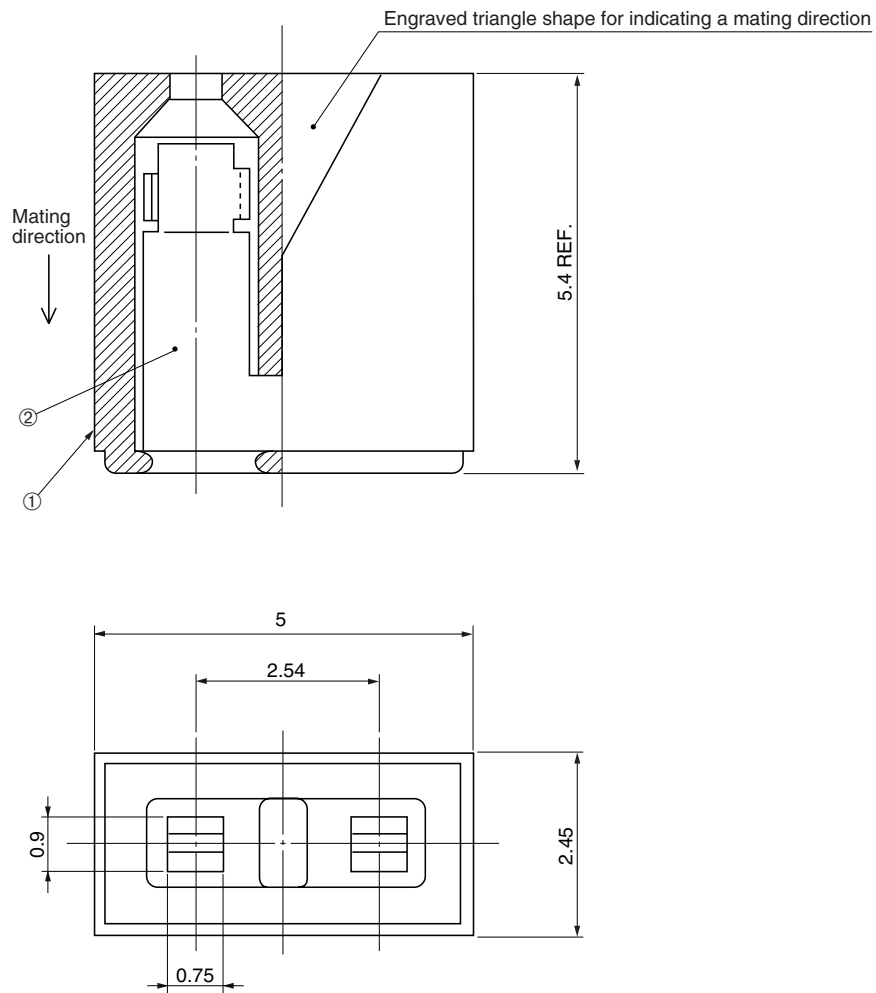


● Configuration of product Part No.

DIC-130 ()

① ②

- ① Series name
- ② Contact plating and Insulator color
 - Blank: Min. 0.7 μm Gold plate, Green
 - A : Min. 0.4 μm Gold plate, Green
 - B : Min. 0.2 μm Gold plate, Green
 - C : Min. 0.76 μm Gold plate, Green
 - W : Min. 0.7 μm Gold plate, Milk white



● Components

①	Insulator
②	Contact

Mating connectors: FFC series or HKP series connector

**Shunt plug for 0.635×0.635 mm square contacts
or 0.64 mm diameter round contacts**
DIC-252() [Z-252()]

For shunt

For 0.635×0.635 mm square contacts

or 0.64 mm diameter round contacts

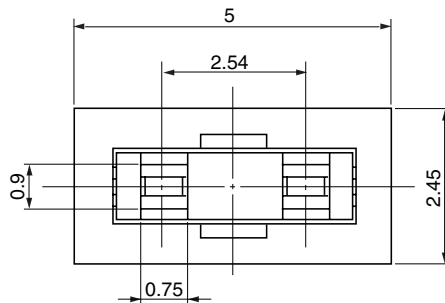
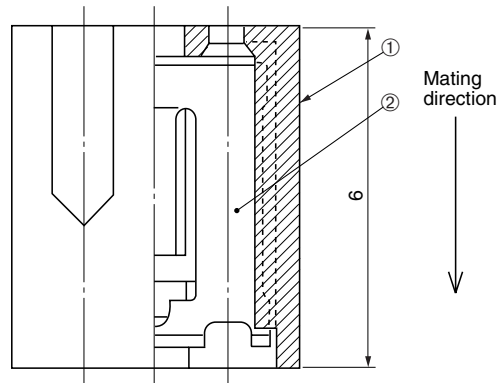
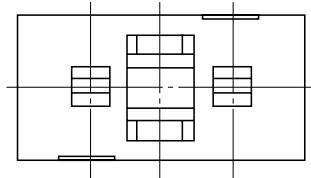


● Configuration of product Part No.

DIC-252 ()

① ②

- ① Series name
- ② Contact plating and Insulator color
 - Blank: Min. 0.2 μm Gold plate, Milk white
 - B : Min. 0.2 μm Gold plate, Black
 - C : Min. 0.76 μm Gold plate, Milk white
 - D : Min. 0.05 μm Gold plate, Milk white



**Note: Please order these products
in batches of 1000's of units.**

● Components

①	Insulator
②	Contact

Mating connectors: FFC series or HKP series connector

**Shunt plug for 0.635×0.635 mm square contacts
or 0.64 mm diameter round contacts (High profile type)**
DIC-208() [Z-208()]

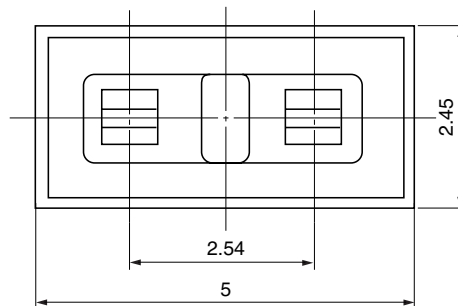
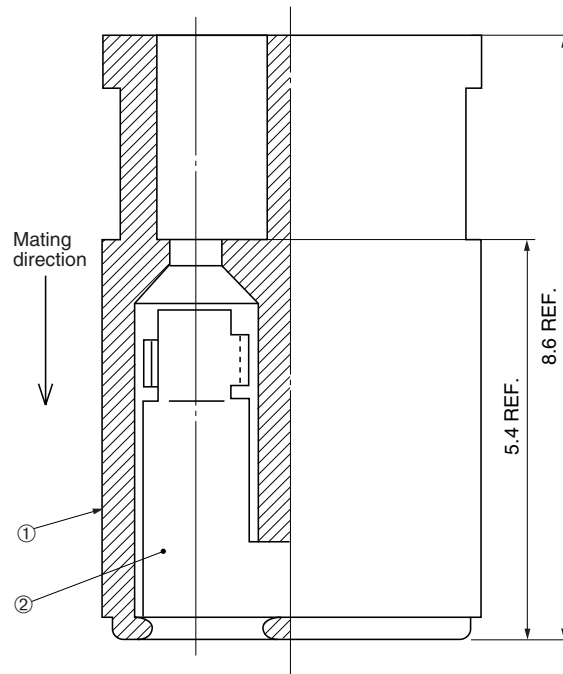


● Configuration of product Part No.

DIC-208 ()

① ②

- ① Series name
- ② Contact plating and Insulator color
 - Blank : Min. 0.7 μm Gold plate, Black
 - A : Min. 0.4 μm Gold plate, Black
 - B : Min. 0.2 μm Gold plate, Black
 - Bu : Min. 0.7 μm Gold plate, Blue



● Components

①	Insulator
②	Contact

Mating connectors: FFC series or HKP series connector

**Shunt plug for 0.635×0.635 mm square contacts
or 0.64 mm diameter round contacts (Double plug type)
DIC-407W**



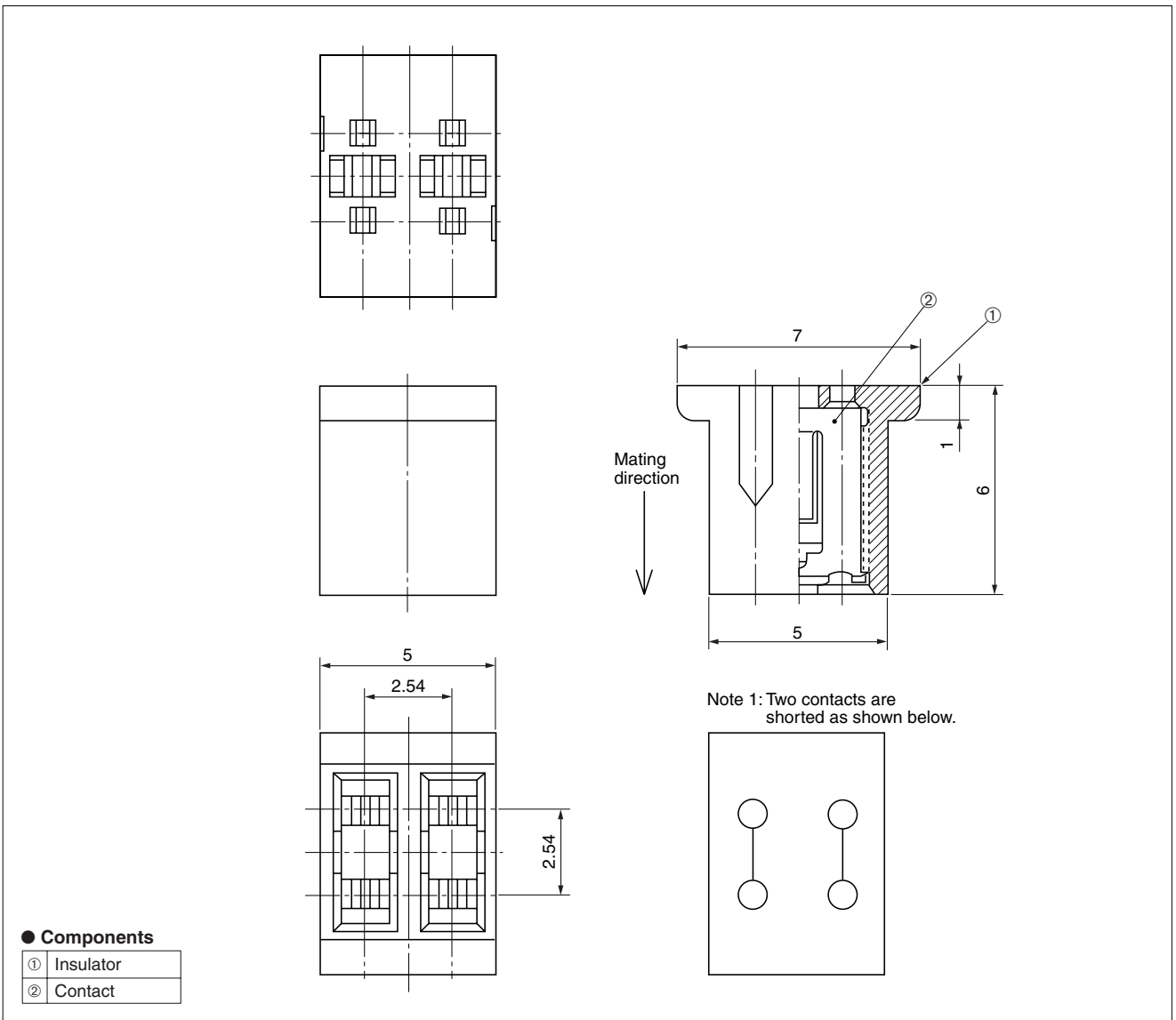
● Configuration of product Part No.

DIC-407W

①

① Series name

Contact plating: Min. 0.2 μm Gold plate



● Components

①	Insulator
②	Contact

Mating connectors: FFC series or HKP series connector

Shunt plug for 0.635×0.635 mm square contacts
or 0.64 mm diameter round contacts (Triple plug type)
DIC-408W

For shunt

For 0.635×0.635 mm square contacts

or 0.64 mm diameter round contacts

RoHS

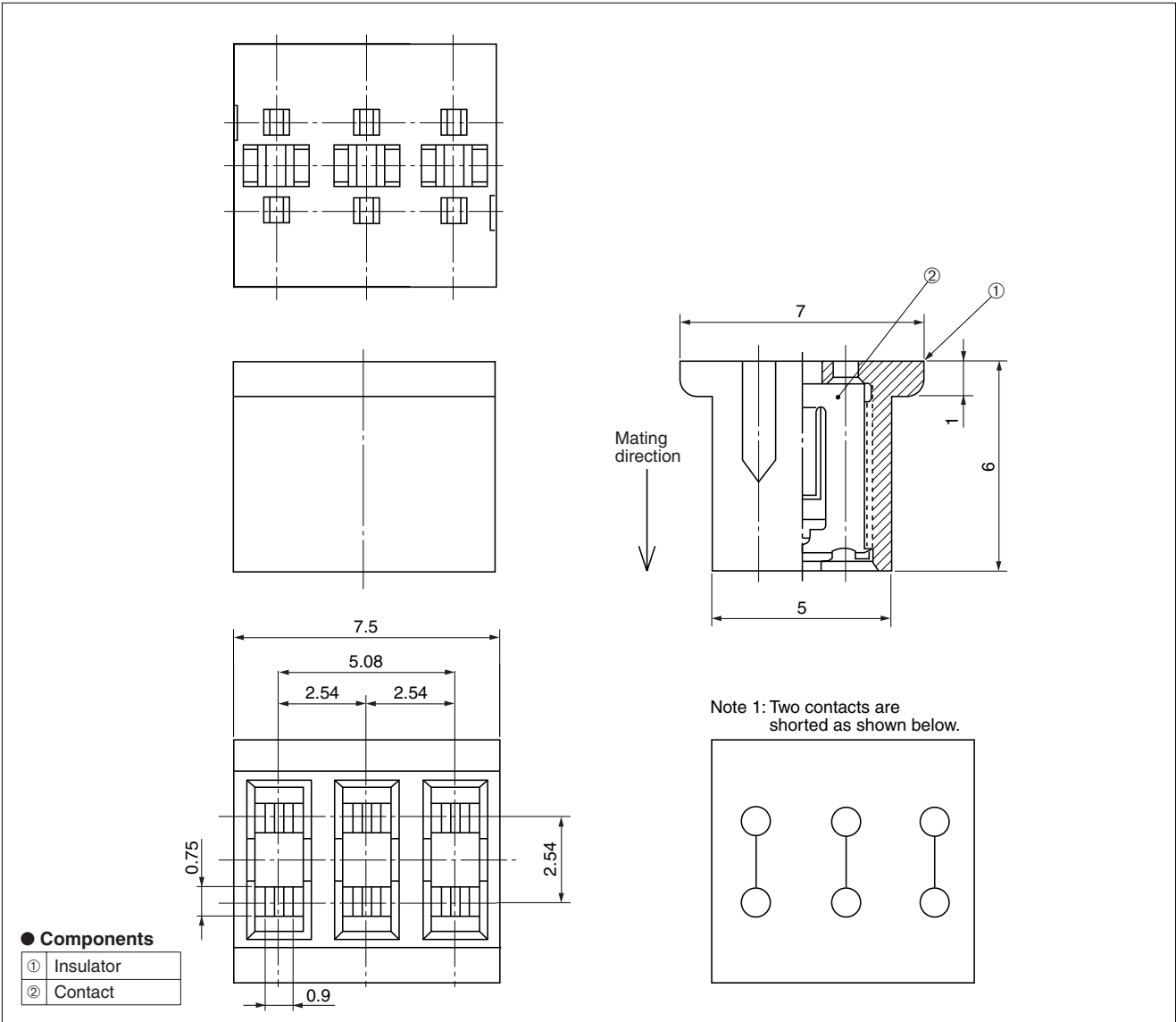


● Configuration of product Part No.

DIC-408W

①

- ① Series name
Contact plating: Min. 0.2 μm Gold plate



Mating connectors: FFC series or HKP series connector

**Shunt plug for 0.635×0.635 mm square contacts and 5.08 mm pitch connectors (High profile type)
DIC-406**

RoHS

2.54 mm pitch connectors

5.08 mm pitch (2.54 mm pitch×2)

For shunt

0.635×0.635 mm square contacts or 0.64 mm diameter round contacts



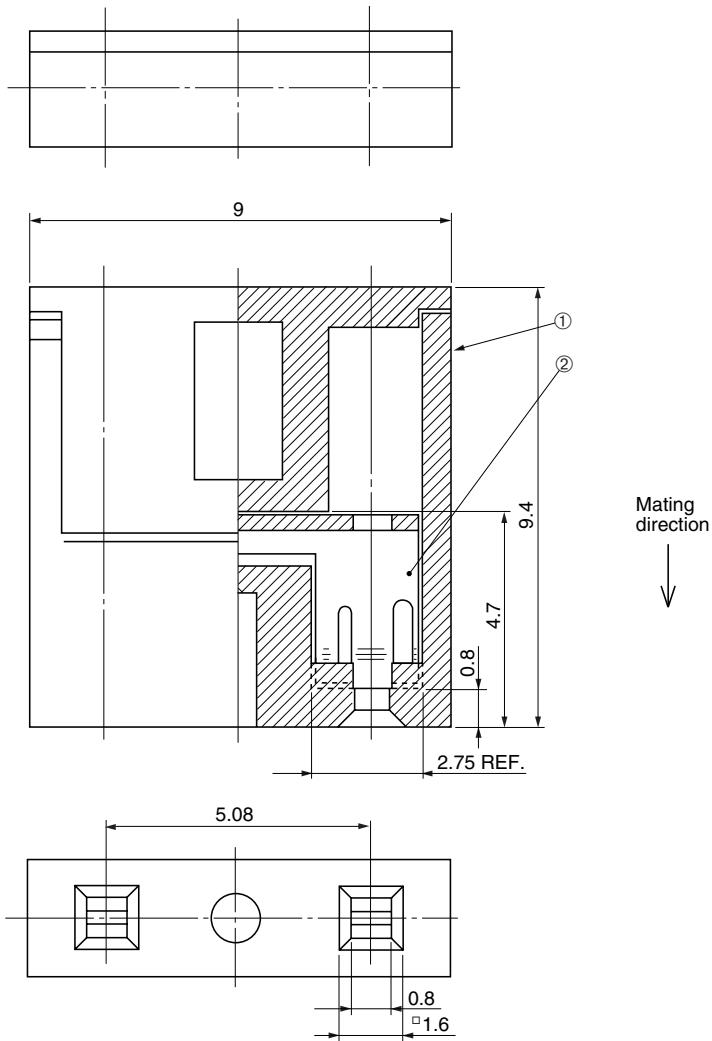
● Configuration of product Part No.

DIC-406

①

① Series name

Contact plating: Min. 0.1 μm Gold plate



● Components

①	Insulator
②	Contact

Mating connectors: DIC series Straight through hole type male connector for PCB

Straight through hole type male connector for PCB DIC-404

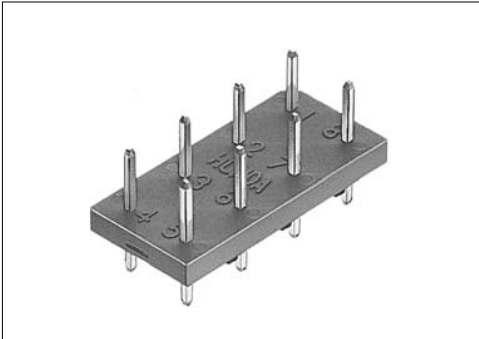
2.54 mm pitch connectors

5.08 mm pitch (2.54 mm pitch×2)

For PCB

RoHS

Straight Through hole

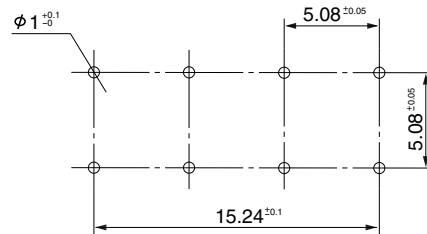
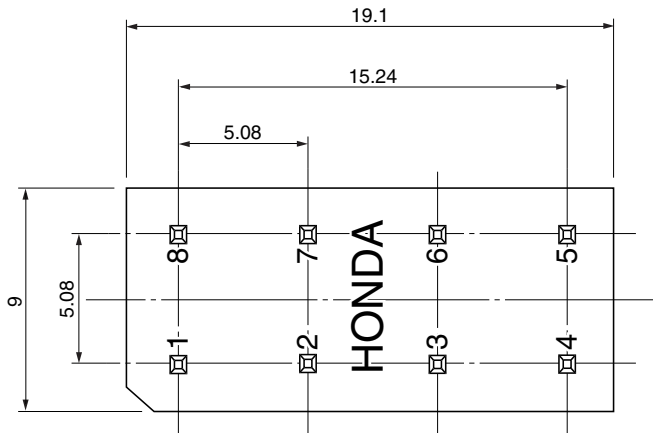


● Configuration of product Part No.

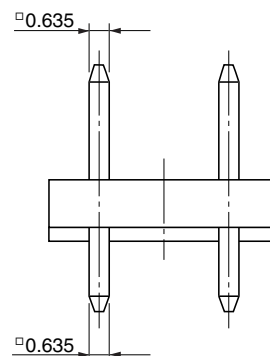
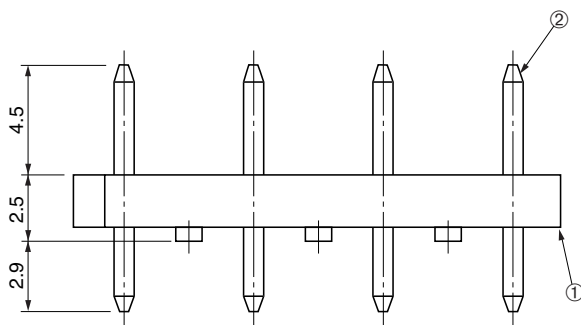
DIC-404

①

- ① Series name
- Contact plating: Min. 0.2 μm Gold plate
- No. of contacts: 8



Recommended PCB layout



● Components

①	Insulator
②	Contact

Mating connectors: DIC series Shunt plug for 0.635×0.635 mm square contact or 0.64 mm diameter round contact