NEW

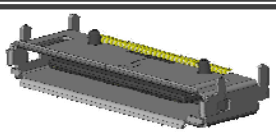
0.5mm pitch stroke connector conforming to USB2.0 Standard

DD1 Series

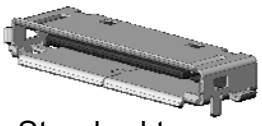
CONNECTOR
MB-0111-5
November 2006

RoHS Compliant

[Plug]

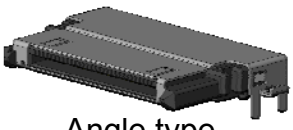


Reverse type

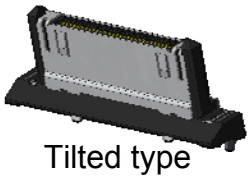


Standard type

[Receptacle]



Angle type



Tilted type

[Cradle]

The DD1 series of connectors are single-line rectangular I/O connectors with 0.5mm pitch stroke conforming to USB2.0 Standard.

Features

■Enhanced twisting resistance at mating/ unmating through equipping a guide rail
■Secure ground connection for EMI prevention
■Conforms to transmission specified in USB2.0 Standard
■PB free

Receptacle

■Occupied volume on chassis was considered at design and small package was achieved.
■Available in standard and reverse mounting type to respond to various mounting situations.
■Hot-plug structure
■Available on embossed tape for automatic mounting

Cradle

■Available in two types. Angle type, which expands cradle designing capacity, and tilted type, slanted at a 75 degree angle to the board.
■13.8mm depth was achieved, which enables minimizing the occupied area on PCB
■Alignment guide structure: guide range of 1.0mm min. (receptacle ↔ cradle)
■Angle type available on embossed tape for automatic mounting.
Tilted type available in exclusive tray.

Plug

■Side-lock type
■Simple part structure enables simple wire termination.
■Standard cable diameter 5.0mm. Cables with other diameters can also be applied.

General Specifications

■No. of contacts : 30 pos.
■Contact resistance:
50m ohm max. (initial)
■Dielectric withstanding voltage :
DC500V per minute
■Insulation resistance:
1,000M ohm min. (initial)
■Rated current: for signal 0.5A
for power 1.0A
■Rated voltage: AC 30Vr.m.s
■Operating temperature:
-25 Deg. C to +75 Deg. C
■Mating cycle: 10,000 times

Materials and Finishes

Receptacle

Components	Materials/ Finishes
Contact	Copper alloy/ Contact: Au plating over Ni Terminal: Au flash plating over Ni
Insulator	Glass filled nylon resin
Shell	Stainless steel/ Sn plating over Ni

Cradle

Components	Materials/ Finishes
Contact	Copper alloy/ Contact: Au plating over Ni Terminal: Au flash plating over Ni
Insulator	Glass filled nylon resin
Shell	Stainless steel/ Main frame: Ni plating Through-hole: Sn plating over Ni
Through-hole Plate	Copper alloy/ Main frame: Ni plating Through-hole: Sn plating over Ni

Plug

Components	Materials/ Finishes
Contact	Copper alloy/ Contact: Au plating over Ni Terminal: Au flash plating over Ni
Insulator	Glass filled nylon resin
Shell	Stainless steel/ Ni plating
Hood	Glass filled polycarbonate/ Color: Black
Lock Spring	Stainless steel/ Ni plating
Clamp Barrel	Copper alloy/ Ni plating
Bushing	PVC/ Color: Black

Ordering Information

■Receptacle

DD1 - R 030 H A 1

- DD1 - R: Series, R: Receptacle
- 030: No. of contacts: 30 pos.
- H: Connection type, H: With hold down, J: Without hold down
- A: Plating specification, A: Contact area: Au plating: 0.1um min., Terminal area: Au flash plating
- 1: Modification Code, 1: Standard mounting type, 7: Reverse mounting type

■Cradle

DD1 - B 030 H A 1

- DD1 - B: Series, B: Cradle
- 030: No. of contacts: 30 pos.
- A: Plating specification, A: Contact area: Au plating: 0.1um min., Terminal area: Au flash plating
- 1: Modification Code
- H: Connection type, H: With hold down, V: 75 degree tilted type

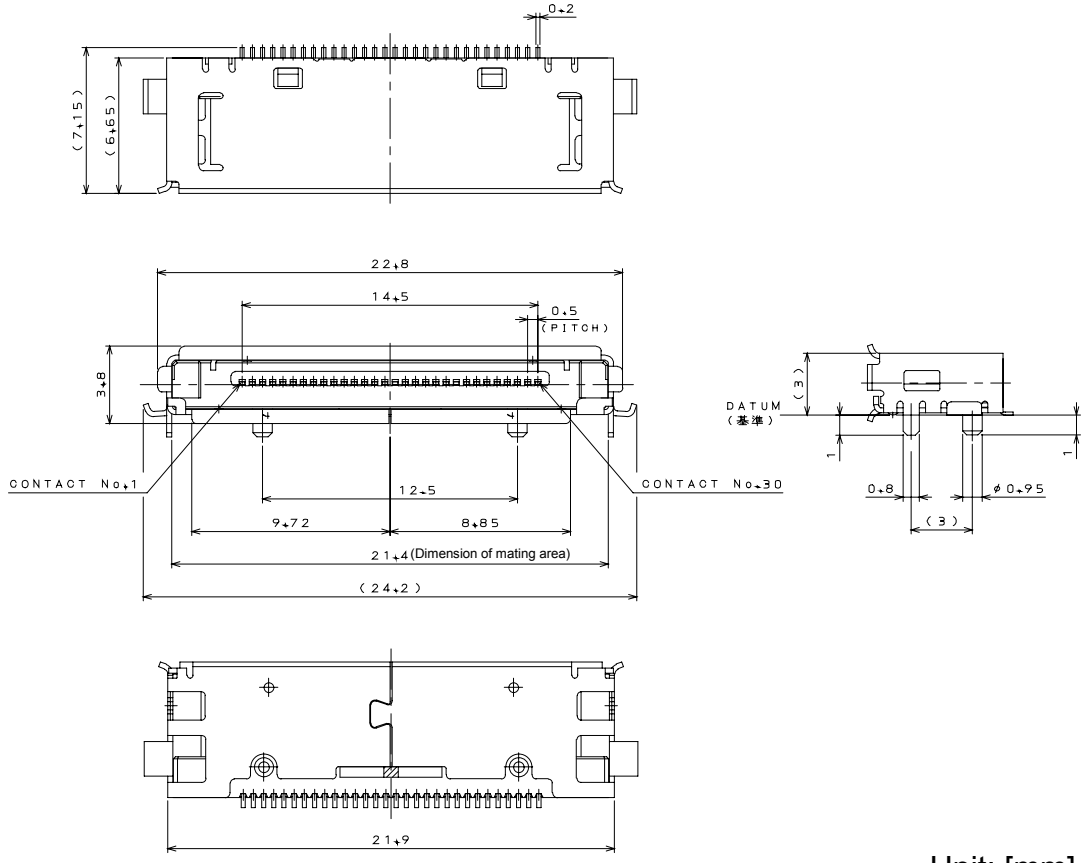
■Plug

DD1 - P 030 M A 1

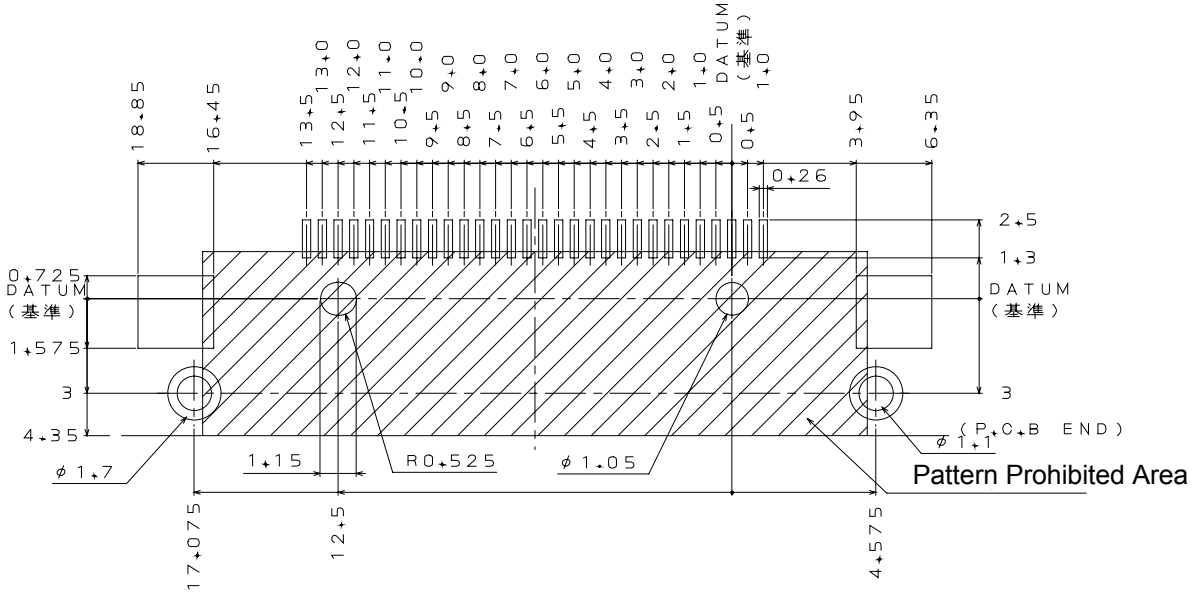
- DD1 - P: Series, P: Plug
- 030: No. of contacts: 30 pos.
- A: Plating specification, A: Contact area: Au plating: 0.1um min., Terminal area: Au flash plating
- 1: Modification Code
- M: Connection type, M: Soldered to cable

Part Number	Board anchoring method			SJ Drawing	Specification
	Hold-down	Through-hole	Boss		
DD1R030HA1	2	2	2	SJ100601	JACS-3285
DD1R030JA7	-	4	2	SJ106061	
DD1B030HA1	2	4	2	SJ100602	
DD1B030VA1	-	6	-	SJ102068	
DD1P030MA1	-	-	-	SJ100603	

Receptacle: DD1R030HA1 SJ Drawing No.: SJ100601

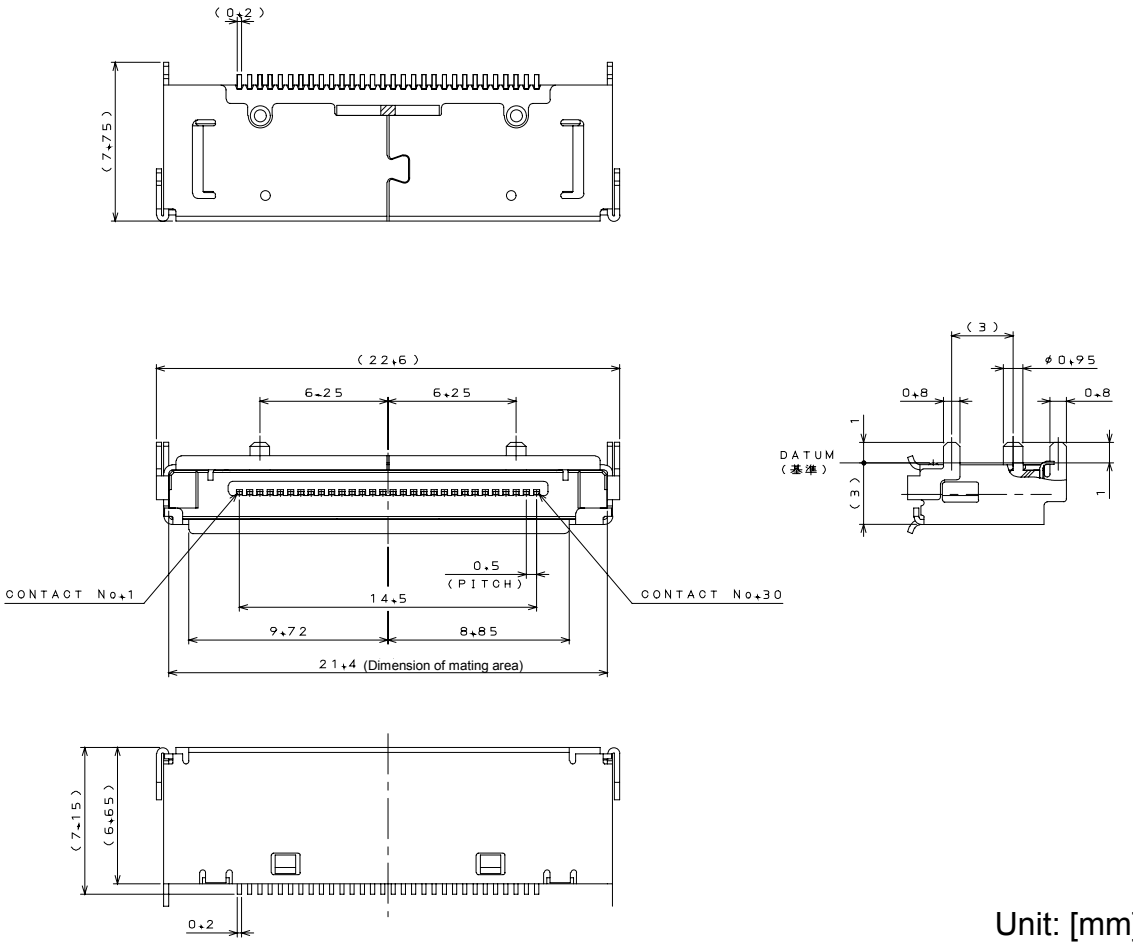


Unit: [mm]

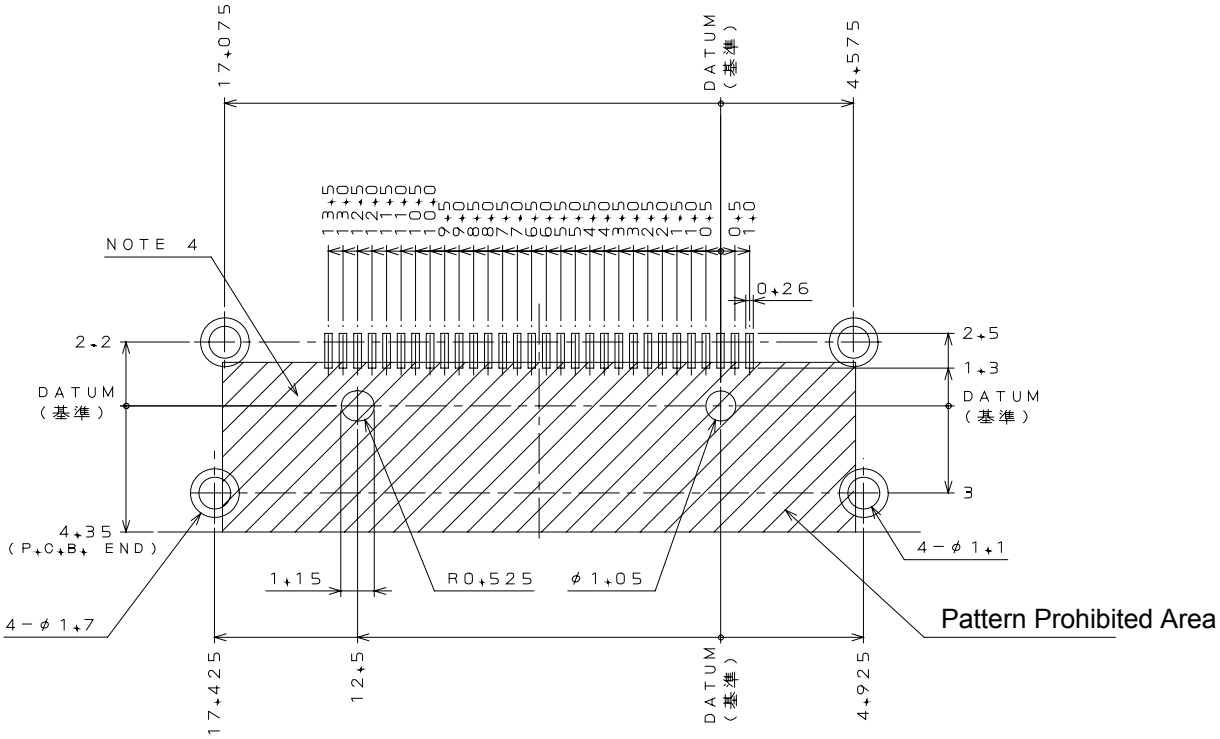


Applicable board dimension
(for reference)

Receptacle: DD1R030JA7 SJ Drawing No.: SJ106061

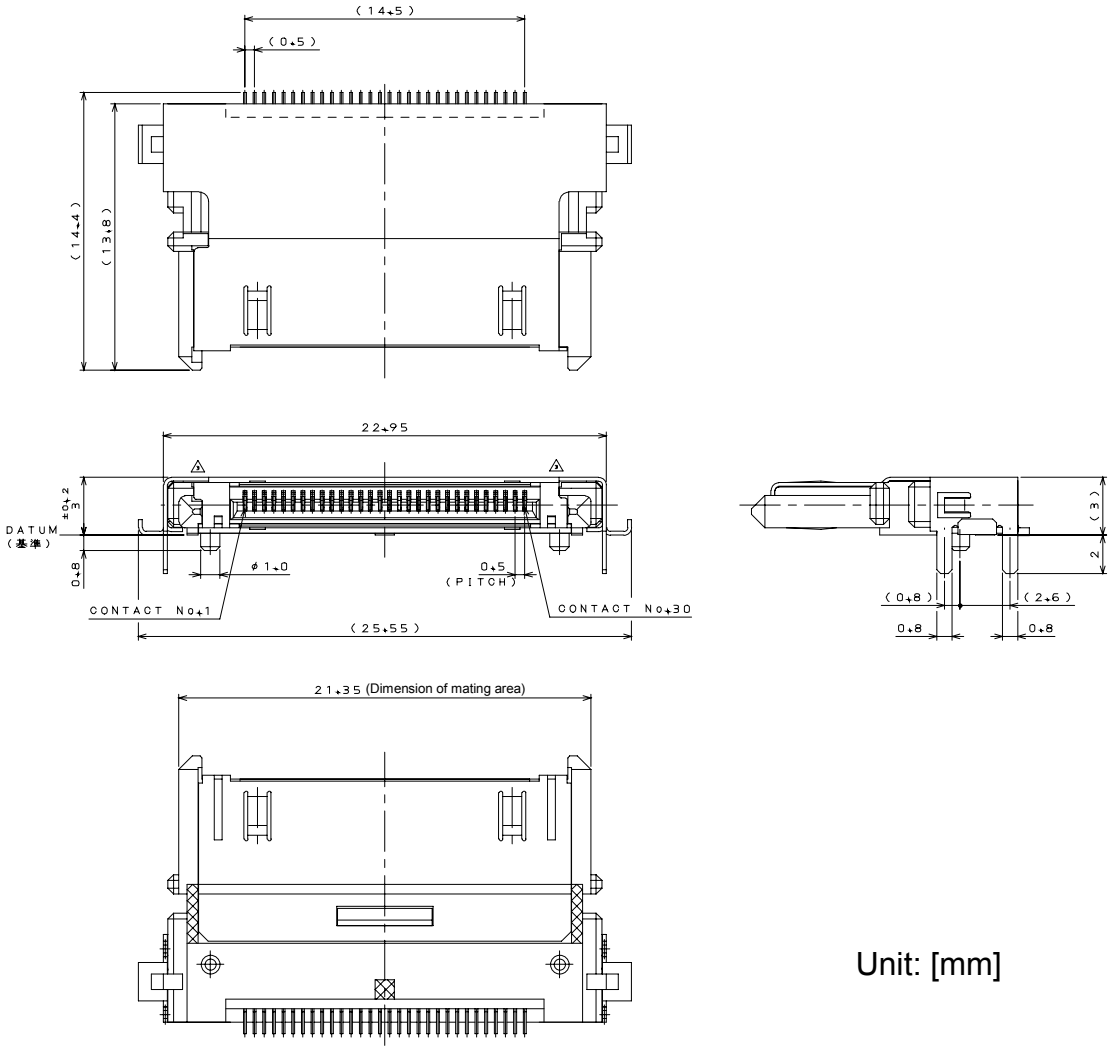


Unit: [mm]

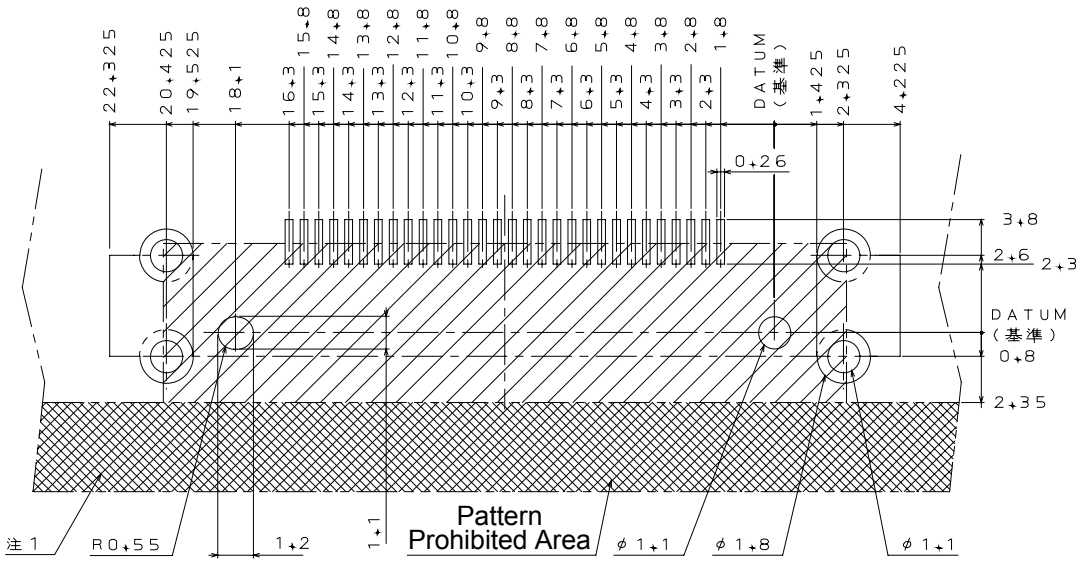


Applicable board dimension
(for reference)

Cradle: DD1B030HA1 SJ Drawing No.: SJ100602



Unit: [mm]



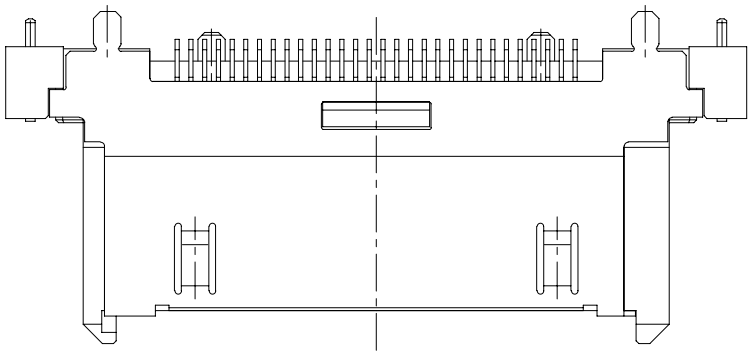
Applicable board dimension (for reference)

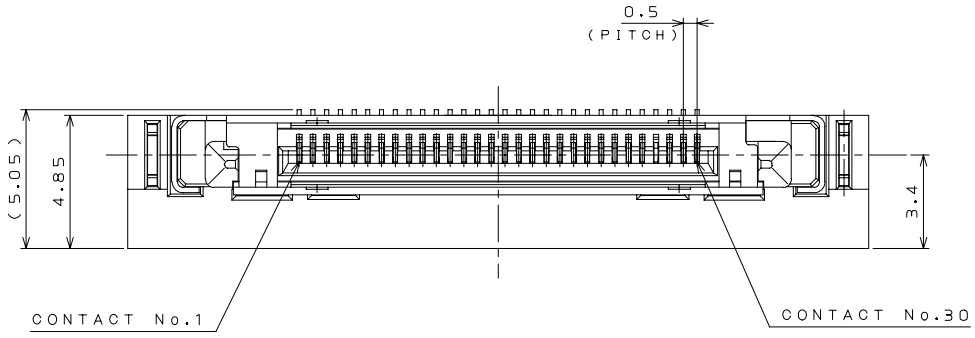
Note 1: This drawing shows a disposable backup board to keep connector and board in position during mounting.

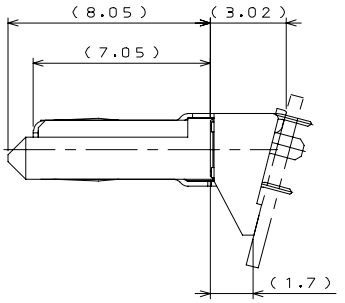
Cradle: DD1B030VA1

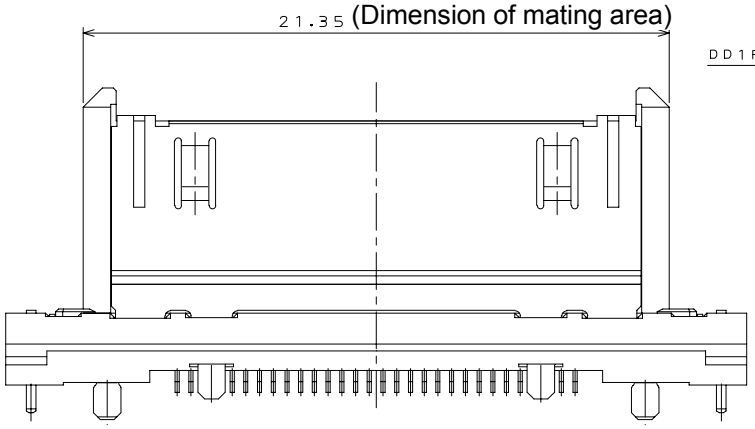
SJ Drawing No.: SJ102068

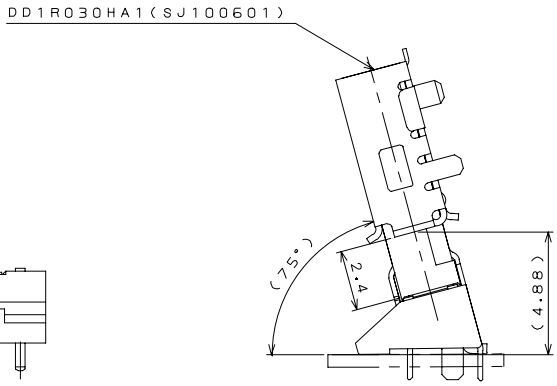
Unit: [mm]



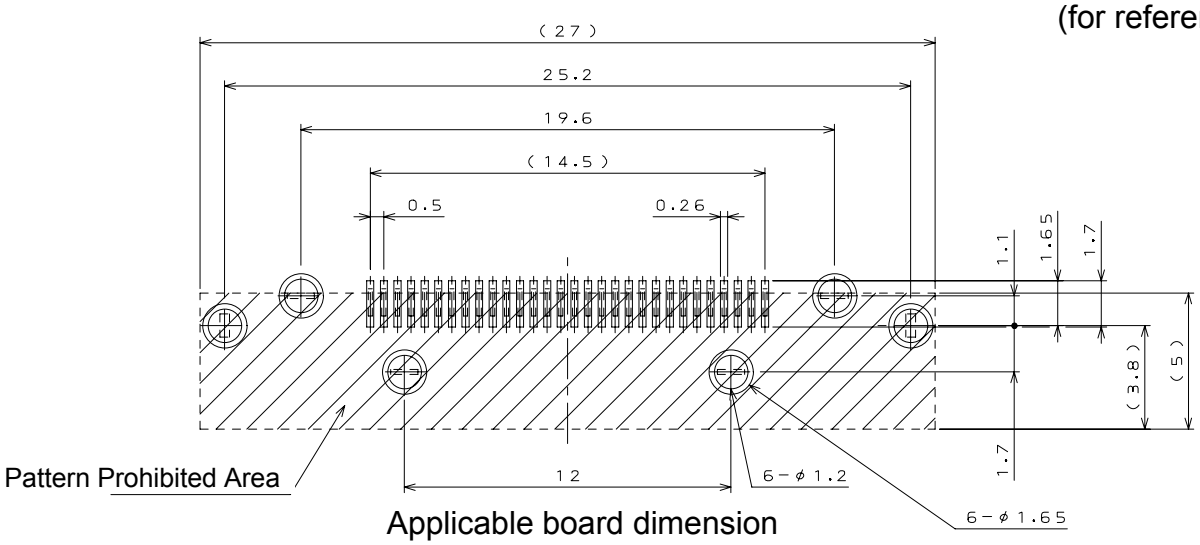








Drawing when mated
(for reference)

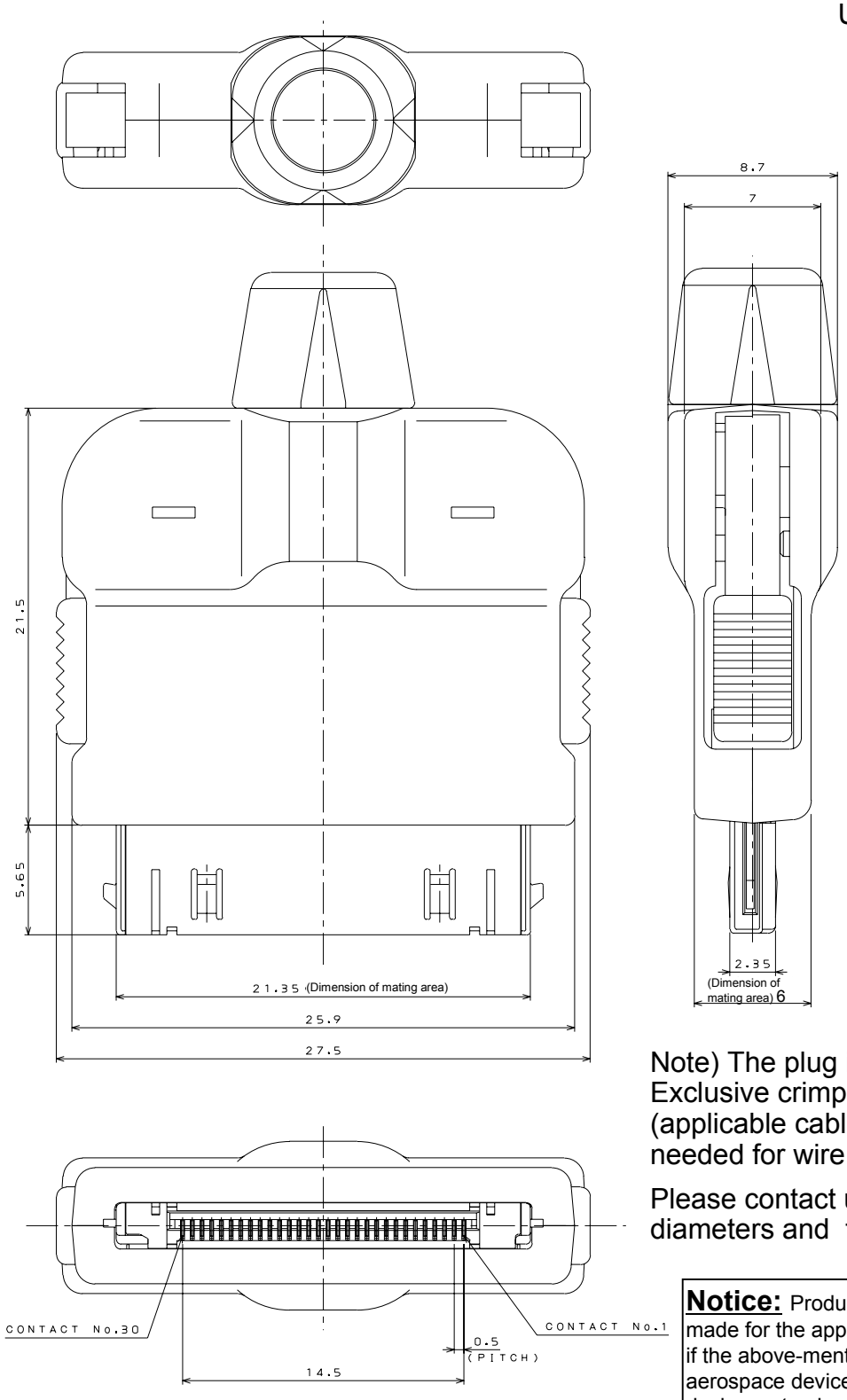


Applicable board dimension
(for reference)

Plug: DD1P030MA1

SJ Drawing No.: SJ100603

Unit: [mm]



Note) The plug is shipped in plug only. Exclusive crimp tool CT150-6-RH07 (applicable cable diameter 5.0 mm) is needed for wire connection and assembly.

Please contact us for other cable diameters and further information.

Notice: Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.
Recommended applications: computers, office machines, measuring devices, telecommunication devices (terminals, mobile devices), AV devices, household applications, FA devices, etc.

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