

NEW



0.5mm pitch stroke connector conforming to USB2.0 Standard

CONNECTOR

DD1 Series

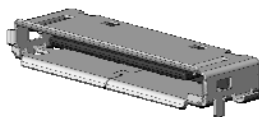
MB-0111-4

July 2006

RoHS Compliant



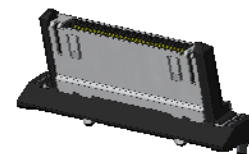
[Plug]



[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 insertion and removal through equipping a guide rail
- Secure ground connection for EMI prevention
- Conforms to transmission specified in USB2.0 Standard

Receptacle

- Compact design, minimized mounting area: 24.20 mm width, 6.65 mm depth and 3.00 mm height.
- 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.
- Angle type has minimized mounting area of 13.8mm depth (terminal not included)
- Alignment guide structure: guide range of 1.0mm min. (receptacle ↔ cradle) for easy handling.
- Angle type available on embossed tape for automatic mounting. Tilted type available in exclusive tray.

Plug

- Side-lock type
- Simple and reduced components for assembly ease
- Standard cable diameter 5.0mm. Cables with other diameters can also be used.

General Specifications

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

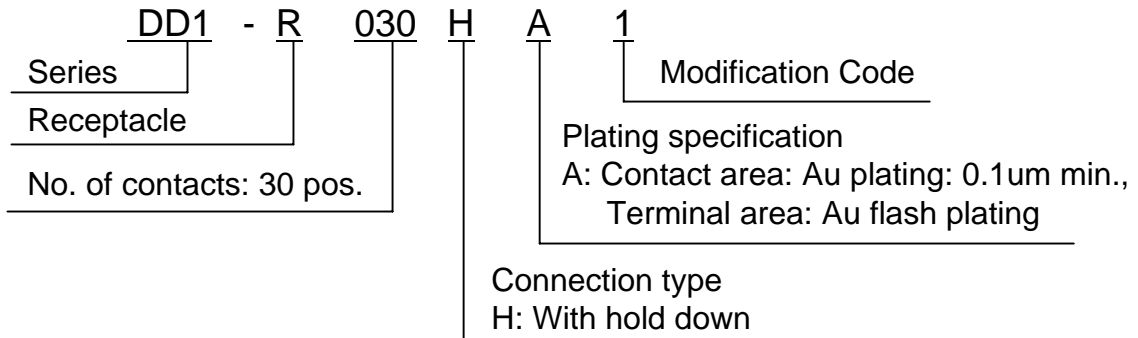
| Components | Materials/ Finishes |
|--------------------|---------------------------------------------------------------------------------|
| Contact | Copper alloy/ Contact: Au plating over Ni Terminal: Au flash plating over Ni |
| Insulator | Glass filled nylon resin |
| Shell | Stainless steel/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

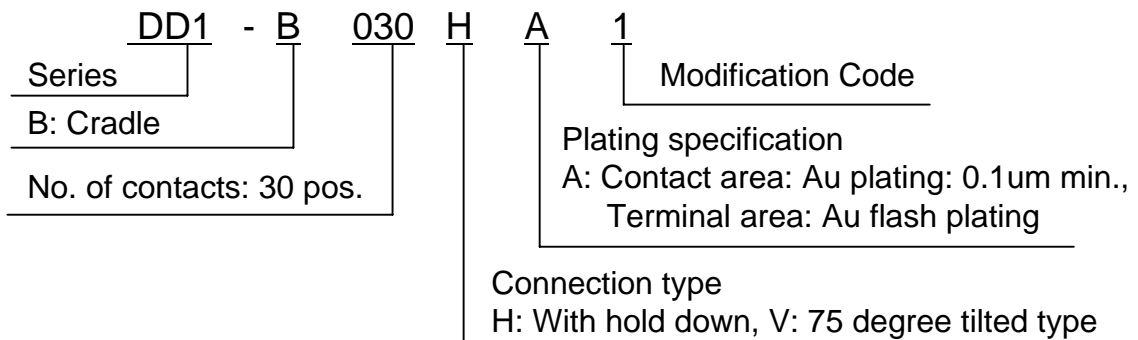
| Components | Materials/ Finishes |
|--------------|---------------------------------------------------------------------------------|
| Contact | Copper alloy/ Contact: Au plating over Ni Terminal: Au flash plating over Ni |
| Insulator | Glass filled nylon resin |
| Shell | Stainless steel/ Ni plating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

Ordering Information

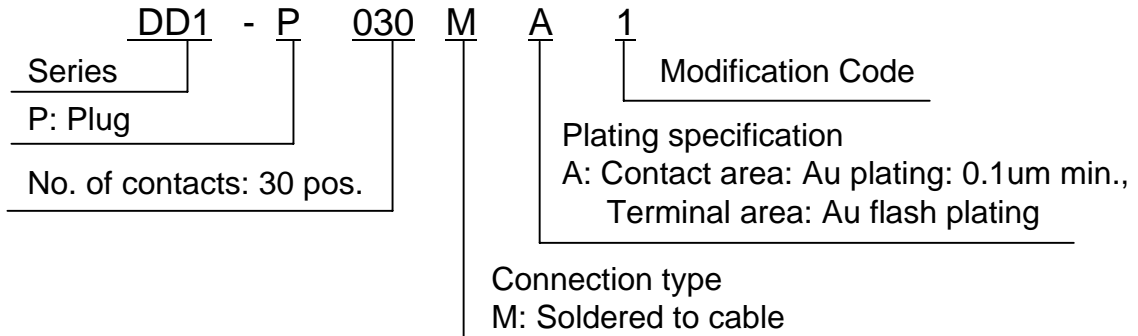
■ Receptacle



■ Cradle



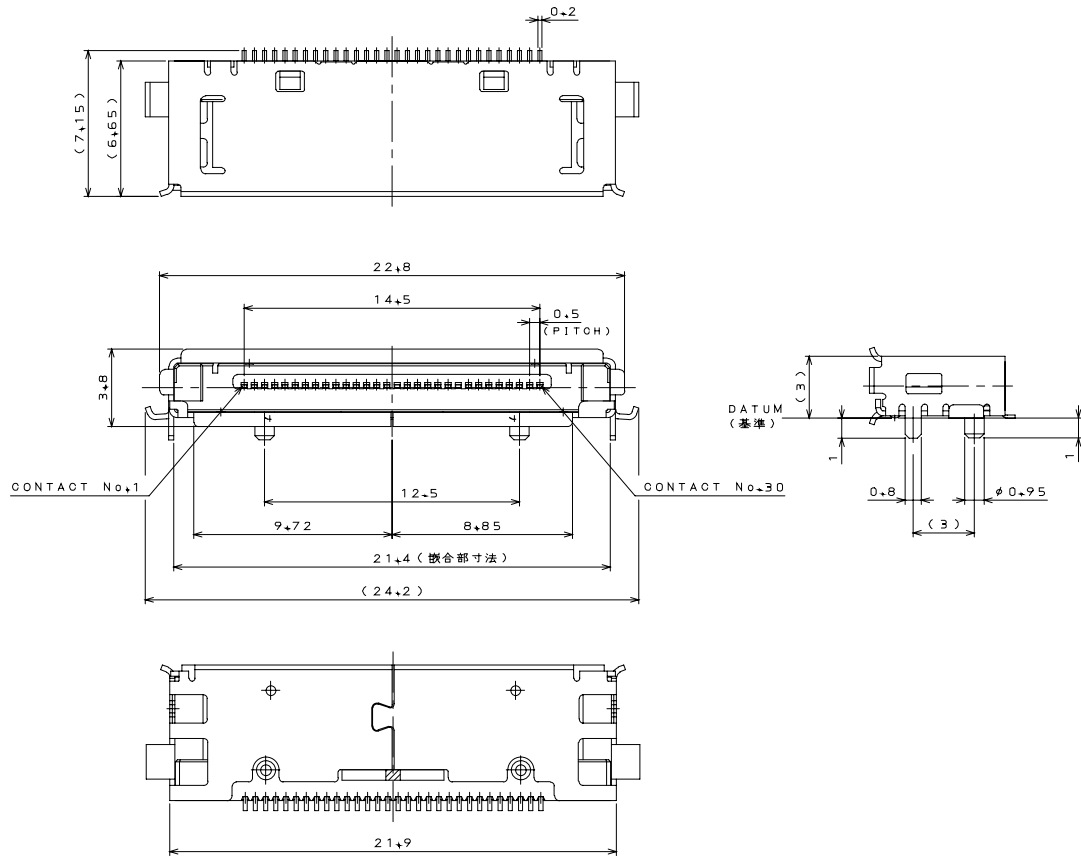
■ Plug



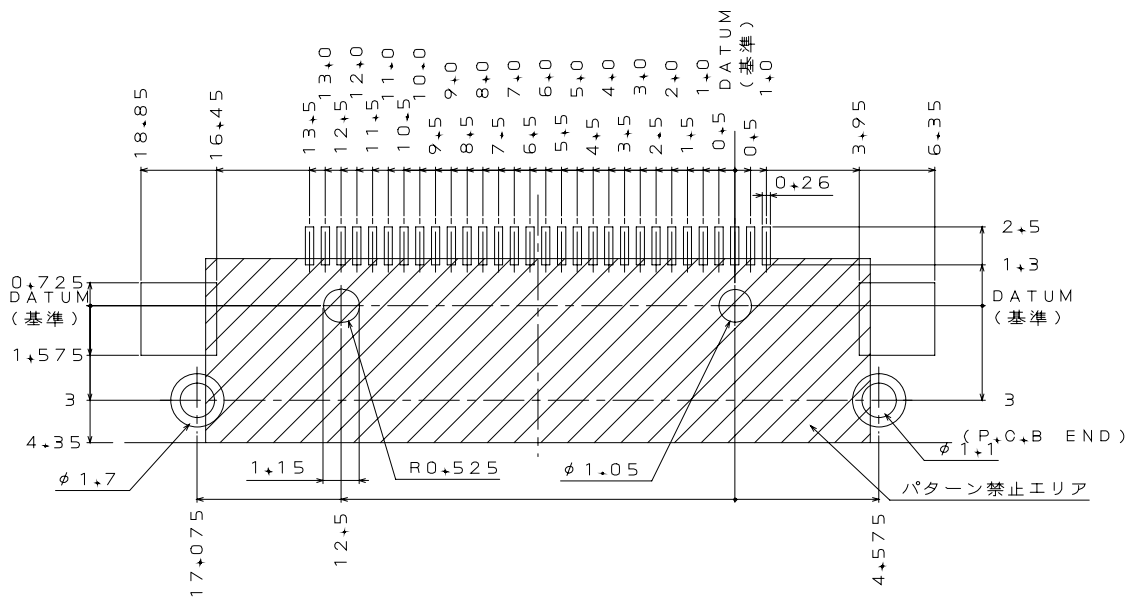
| Part Number | Board anchoring method | | | SJ Drawing | Specification |
|-------------|------------------------|--------------|------|------------|---------------|
| | Hold-down | Through-hole | Boss | | |
| DD1R030HA1 | 2 | 2 | 2 | SJ100601 | JACS-3285 |
| DD1B030HA1 | 2 | 4 | 2 | SJ100602 | |
| DD1B030VA1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

Receptacle: DD1R030HA1

SJ Drawing No.: SJ100601



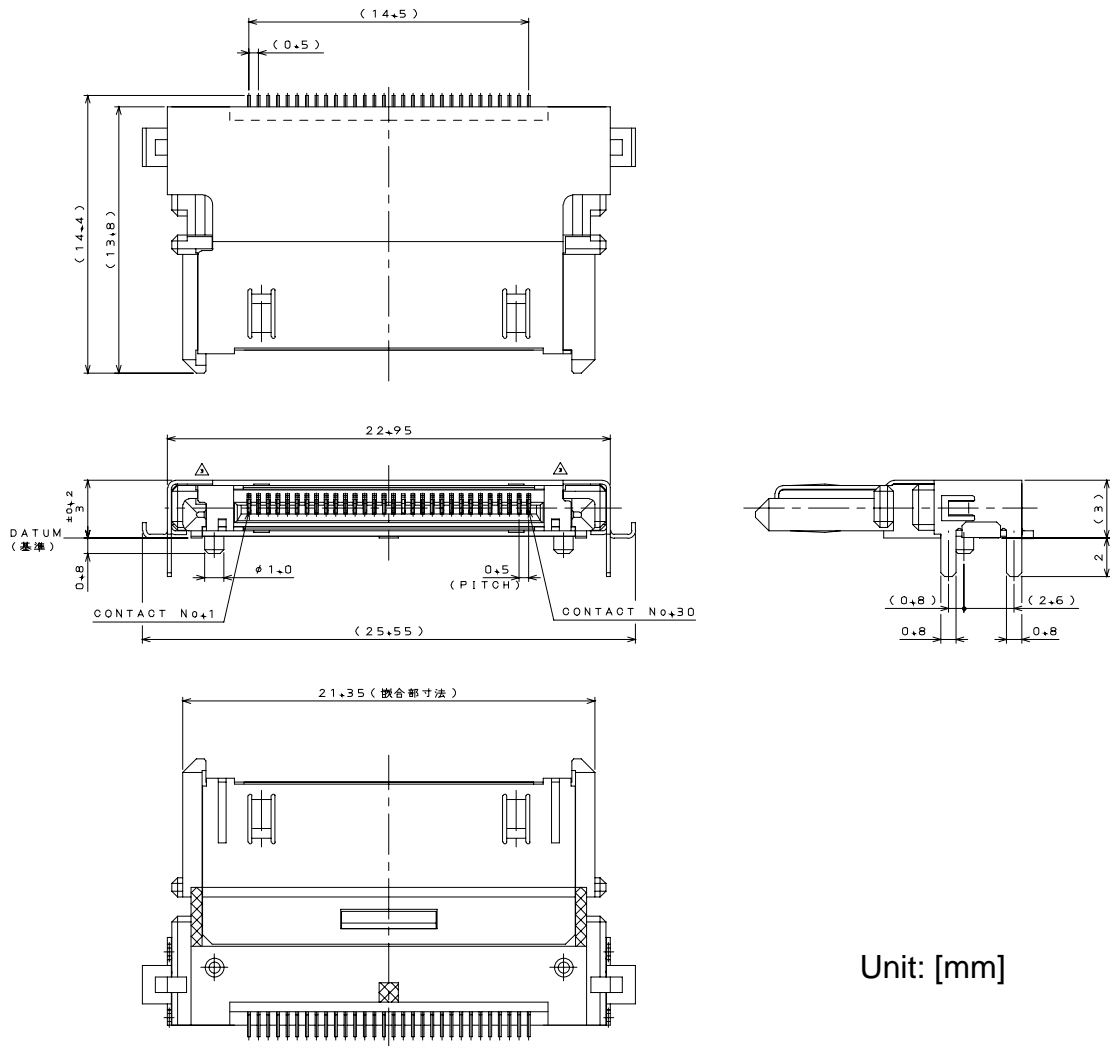
Unit: [mm]



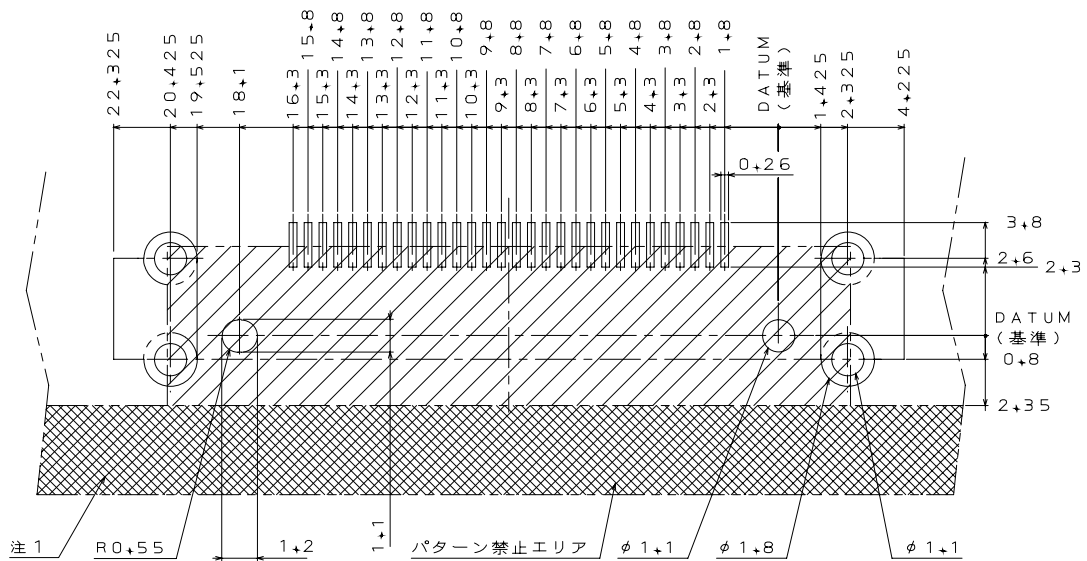
Applicable board dimension
(for reference)

Cradle: DD1B030HA1

SJ Drawing No.: SJ100602



Unit: [mm]



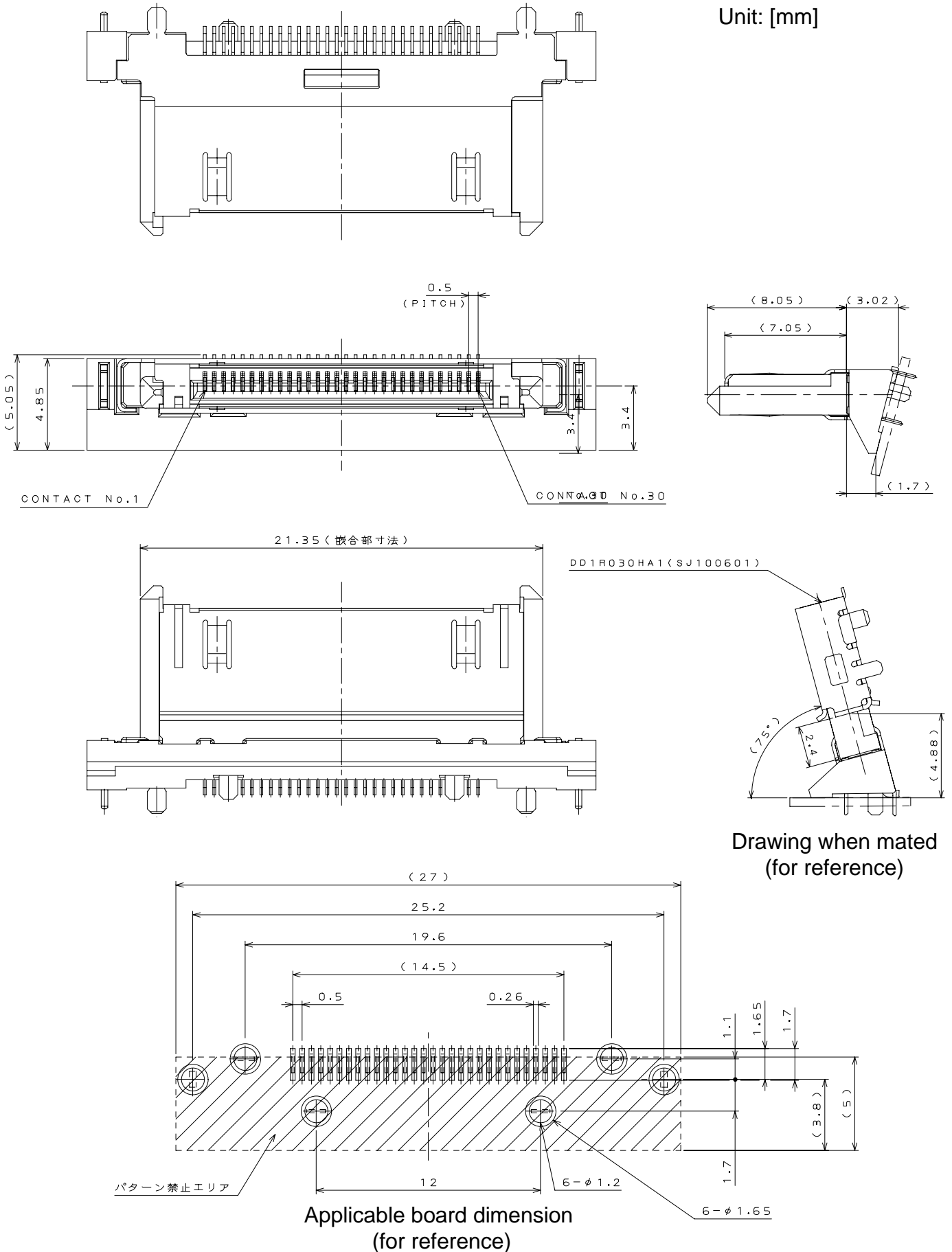
Applicable board dimension
(for reference)

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]



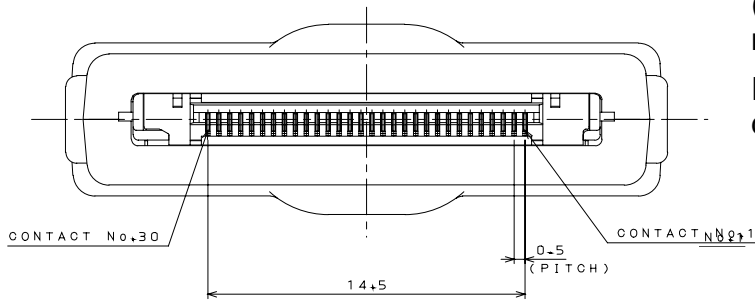
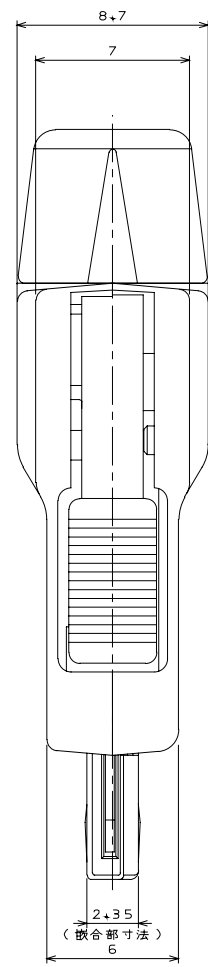
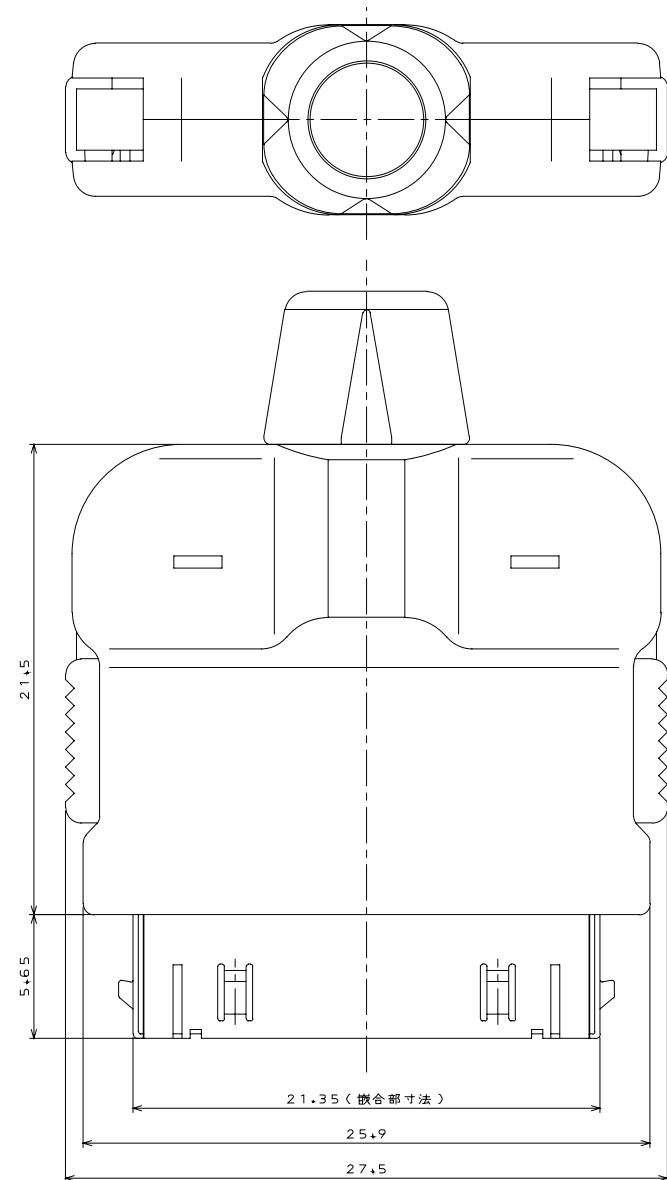
Drawing when mated
(for reference)

Applicable board dimension
(for reference)

Plug: DD1P030MA1

SJ Drawing No.: SJ100603

Unit: [mm]



Note) The plug is shipped in components. 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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