



0.5mm pitch stroke conforming to USB2.0 Standard

CONNECTOR

MB-0112-3

July 2007

## DD2 Series

**RoHS Compliant**



[Plug]



[Receptacle]



[Cradle]

The DD2 series of connectors are double-line rectangular 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: 19.25 width, 8.6 depth and 3.8mm height.
- Hot-plug structure
- Available on embossed tape for automatic mounting

### **Cradle**

- Minimized mounting area 13.8mm depth (terminal not included)
- 1.0mm alignment guide structure: guide range of 1.0mm min. (receptacle ↔ cradle)
- Available on embossed tape for automatic mounting

### **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 : 40 pos.                              | ■ Rated current: for signal 0.5A<br>for power 1.0A   |
| ■ Contact resistance:<br>50m ohm max. (initial)          | ■ Rated voltage: AC 30Vr.m.s                         |
| ■ Dielectric withstanding voltage :<br>DC300V per minute | ■ Operating temperature:<br>-25 Deg. C to +75 Deg. C |
| ■ Insulation resistance:<br>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<br>Terminal: Sn plating over Ni   |
| Insulator  | Glass filled nylon resin  |
| Shell      | Stainless steel/ Main frame: Ni plating<br>Through-hole: Sn plating over Ni |

### Cradle

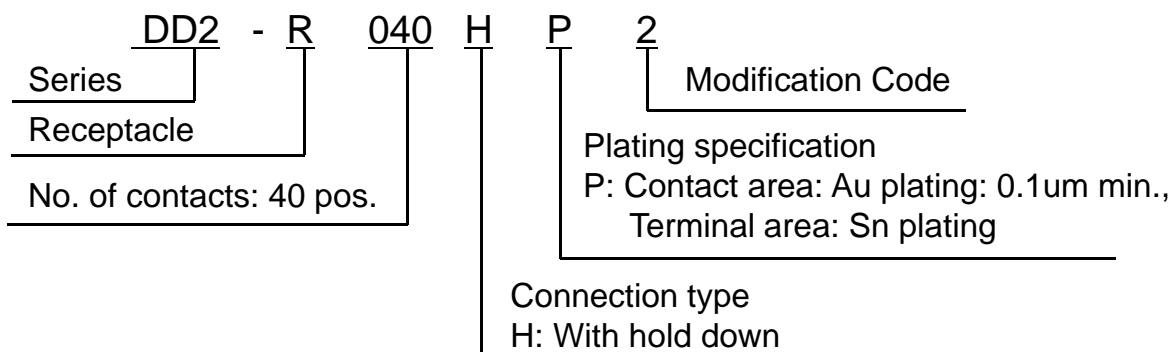
| Components | Materials/ Finishes   |
|------------|---|
| Contact    | Copper alloy/ Contact: Au plating over Ni<br>Terminal: Au flash plating over Ni |
| Insulator  | Glass filled nylon resin  |
| Shell      | Stainless steel/ Main frame: Ni plating<br>Through-hole: Sn plating over Ni     |

### Plug

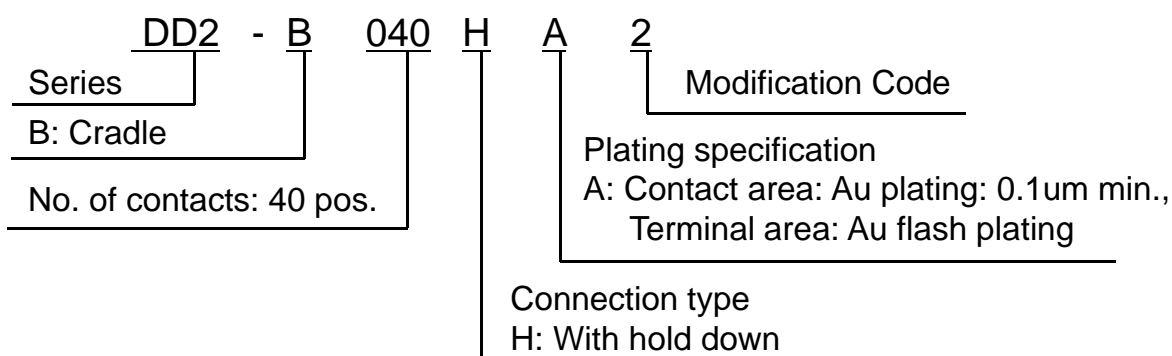
| Components   | Materials/ Finishes   |
|--------------|---|
| Contact      | Copper alloy/ Contact: Au plating over Ni<br>Terminal: Au flash plating over Ni |
| Insulator    | Glass filled nylon resin  |
| Shell        | Stainless steel/ Ni plating   |
| Hood         | Glass filled polycarbonate/ Color: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

Ordering Information

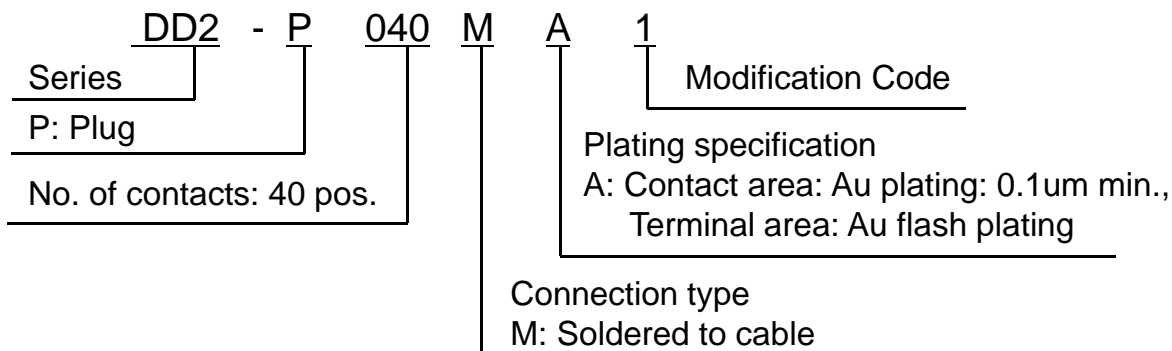
Receptacle



Cradle



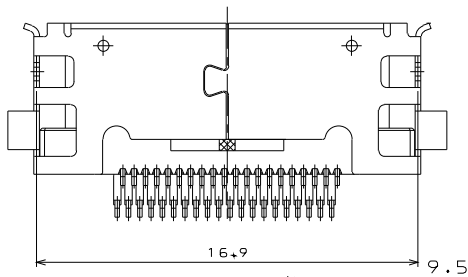
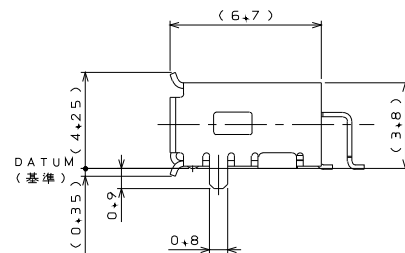
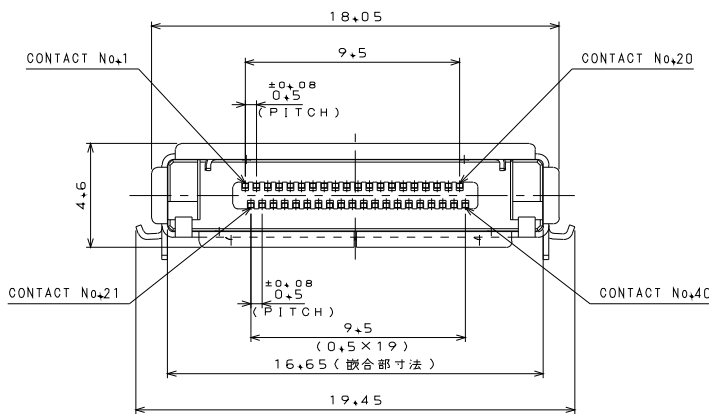
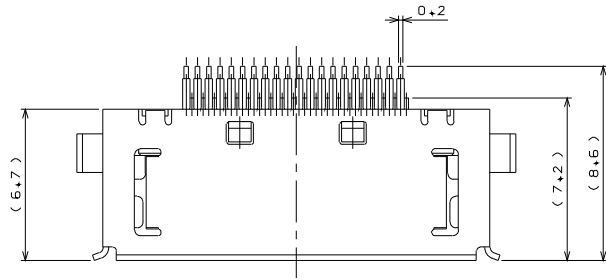
Plug



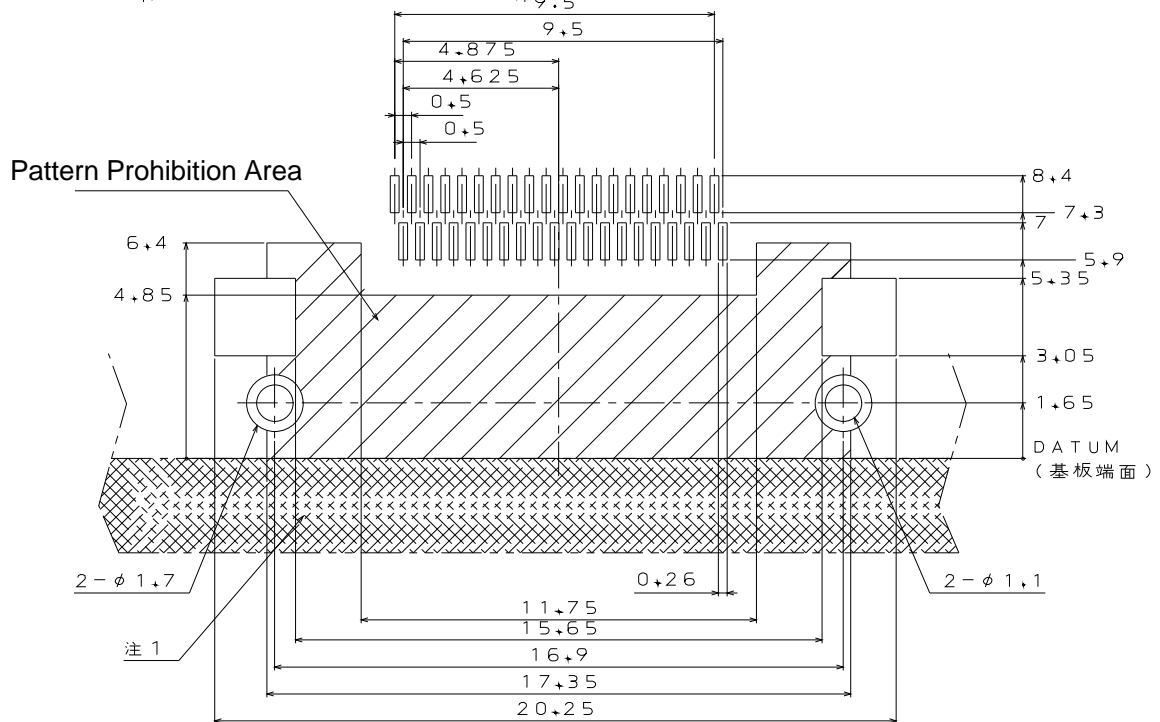
| Part Number | Board anchoring method |              | SJ Drawing | Specification |
|-------------|------------------------|--------------|------------|---------------|
|             | Hold-down              | Through-hole |            |               |
| DD2R040HP2  | 2 parts                | 2 parts      | SJ100279   | JACS-30011    |
| DD2B040HA2  | 2 parts                | 4parts       | SJ100281   |               |
| DD2P040MA1  | -                      | -            | SJ100278   |               |

Receptacle: DD2R040HP2

SJ Drawing No.: SJ100279



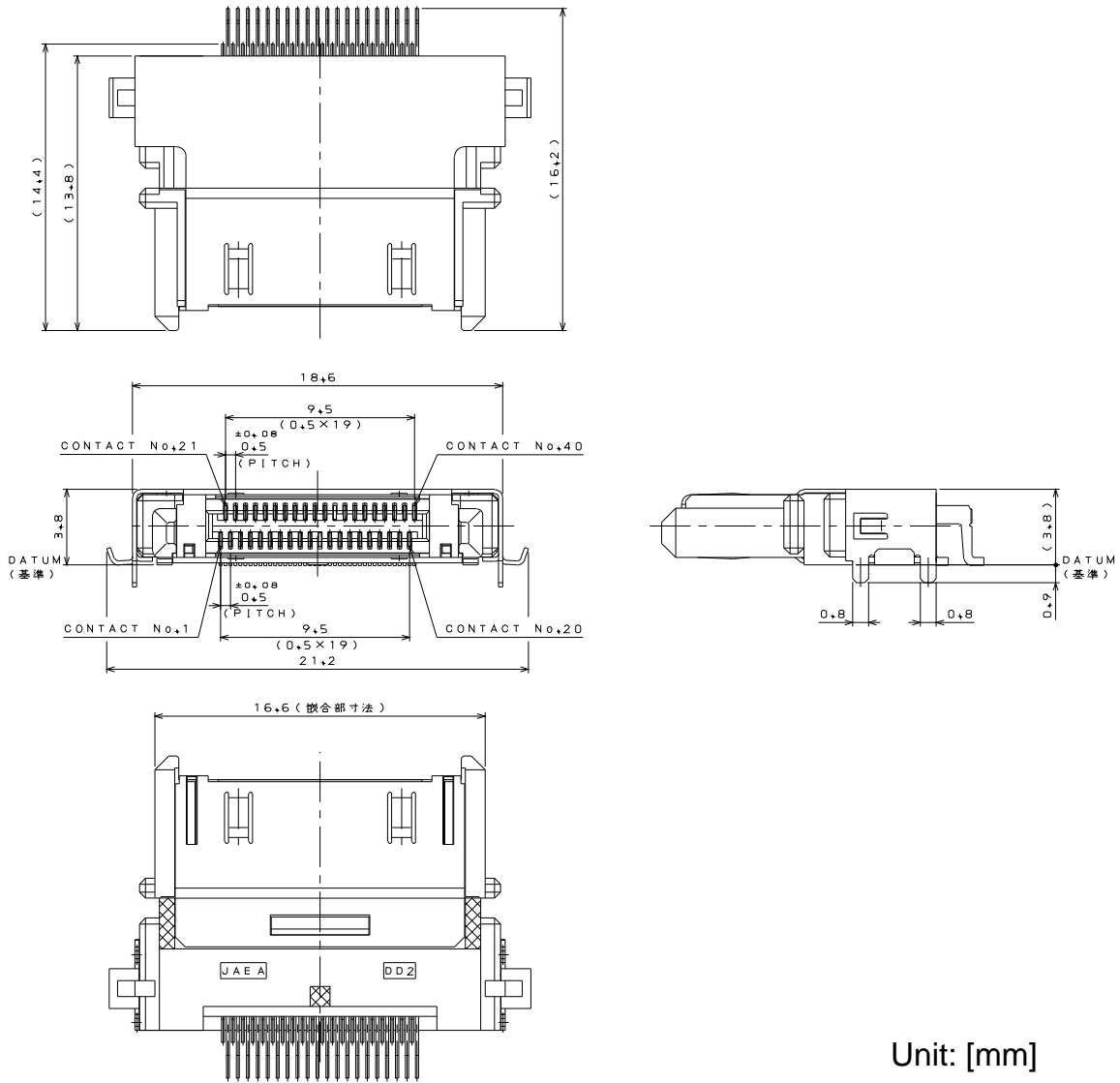
Unit: [mm]



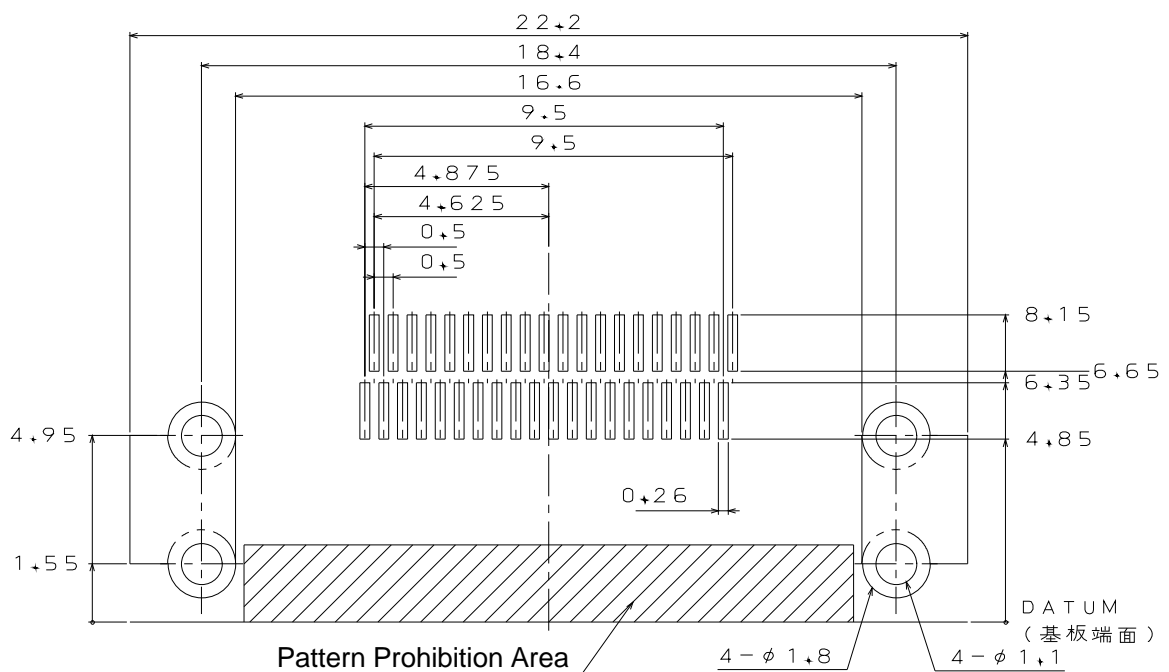
Applicable board dimension (for reference)

Receptacle: DD2B040HA2

SJ Drawing No.: SJ100281



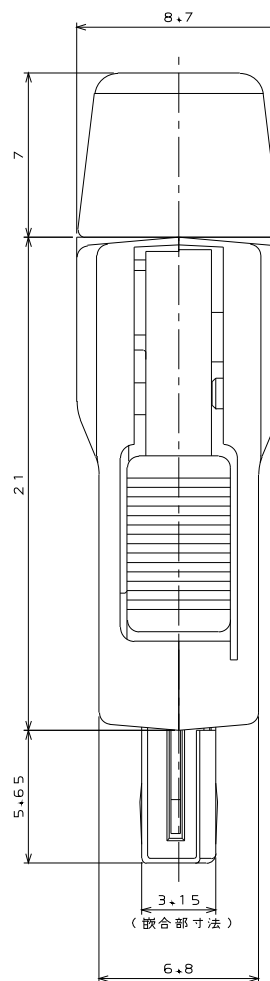
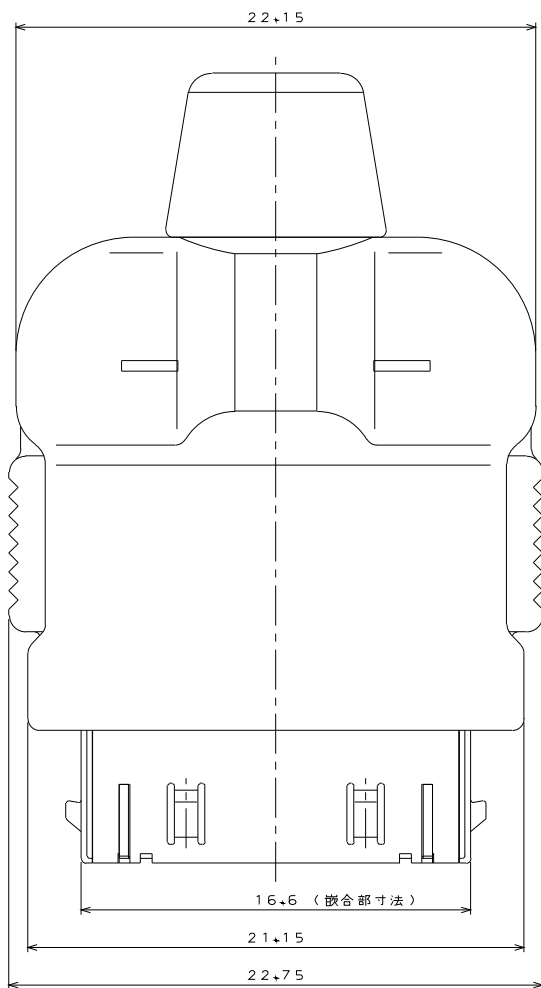
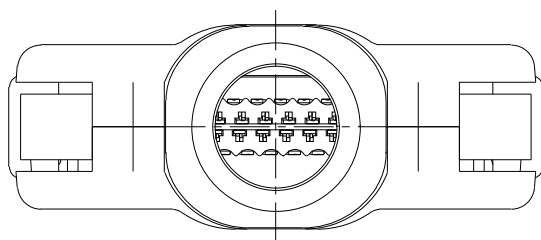
Unit: [mm]



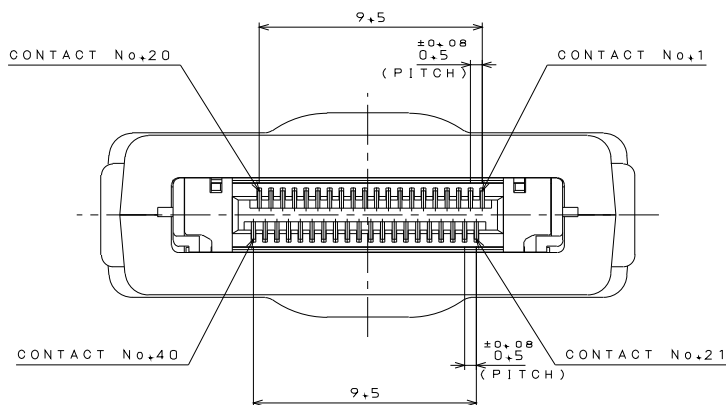
Applicable board dimension (for reference)

Receptacle: DD2P040MA1

SJ Drawing No.: SJ100278



Unit: [mm]



**Japan Aviation Electronics Industry, Limited**

**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.