The DP3 Series has been developed as an I/O connector compatible with Thunderbolt™ Technology for high-speed transmission between PCs and peripheral devices.

*Thunderbolt is a trademark of Intel in the US and other countries.

**Features**

- 10Gbps high-speed transmission connector for Thunderbolt.
- Available in standard and reverse mounting, sunk-into-the-board type is also available.
- Enhanced board mounting strength with through-hole hold-downs on the metal shell.
- Friction lock with the metal shell enhances cable plug retention strength and creates a clear click feeling when mated.
- Connector is supplied in embossed reel.

**General Information**

- No. of Contacts: 20
- Contact Resistance: 100m Ω max.
- Dielectric Withstanding Voltage: AC300Vr.m.s per 1 minute
- Operating Temperature: -20 Deg. C to +85 Deg. C
- Rated Current: 0.5A (signal pin)
- Insulation Resistance: 10MΩ min.
- Durability: 10,000 mating cycles
### Materials / Finishes

<table>
<thead>
<tr>
<th>Component</th>
<th>Material / Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
<td>Copper alloy / 0.3µ Au plating over Ni (contact area) Sn plating over Ni (terminal area)</td>
</tr>
<tr>
<td>Housing</td>
<td>Glass filled LCP / None</td>
</tr>
<tr>
<td>Shell</td>
<td>Stainless steel / Ni</td>
</tr>
</tbody>
</table>

### Ordering Information

```
DP3 R 020 S U32 J Q 1 R****
```

- **Emboss Reel**
  - Number of pieces per reel
- **Through-hole Terminal Length**
  - None: 1.4mm
  - 1: 2.1 mm
- **Plating**
  - Q: 0.3µm Au plating
- **J: Angle type**
- **Distance from Mounting Surface to Center Line of Mating Interface**
  - U32: 3.2mm upward from mating surface
  - L05: 0.5mm downward from mating surface
- **Mounting Direction**
  - S: Standard mounting
  - R: Reverse mounting
- **No. of Contacts**
- **R: Receptacle**
- **Series**
<table>
<thead>
<tr>
<th>Part Number</th>
<th>SJ Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP3R020SU32JQ</td>
<td>SJ112287</td>
</tr>
<tr>
<td>(Individual Connector)</td>
<td></td>
</tr>
<tr>
<td>DP3R020SU32JQR400</td>
<td>SJ112331</td>
</tr>
<tr>
<td>(Embossed Reel)</td>
<td></td>
</tr>
</tbody>
</table>

On-board
Standard Type

Unit: mm
<table>
<thead>
<tr>
<th>Part Number</th>
<th>SJ Drawing No.</th>
<th>Sunk-into-the-board Reverse Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP3RB20RU05JQ (Individual Connector)</td>
<td>SJ112304</td>
<td></td>
</tr>
<tr>
<td>DP3RB20RU05JQR400 (Embossed Reel)</td>
<td>SJ112336</td>
<td></td>
</tr>
</tbody>
</table>

![Diagram](image)

**Unit: mm**
<table>
<thead>
<tr>
<th>Part Number</th>
<th>SJ Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP3R020RL30JQ (Individual Connector)</td>
<td>SJ112303</td>
</tr>
<tr>
<td>DP3R020RL30JQR400 (Embossed Reel)</td>
<td>SJ112335</td>
</tr>
</tbody>
</table>

**Sunk-into-the-board Reverse Type**

Unit: mm
Applicable Dimensions of Board

REF: On-board, Standard Type

Unit: mm

* Please refer to SJ drawing when considering use of this product.

Notice: Products shown in this brochure 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.

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.