GCT USB4070 is designed and manufactured to be compatible with USB Type C specification latest release. Compliance testing for products conforming to the USB type-C cable and connector specification are currently under development by the USB-IF.

### Section B-B

#### Pin Signal Mating Sequence

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Mating Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>GND</td>
<td>First</td>
</tr>
<tr>
<td>A2</td>
<td>SSTxp1</td>
<td>Second</td>
</tr>
<tr>
<td>A3</td>
<td>SSTxn1</td>
<td>Second</td>
</tr>
<tr>
<td>A4</td>
<td>VBUS</td>
<td>First</td>
</tr>
<tr>
<td>A5</td>
<td>CC</td>
<td>Second</td>
</tr>
<tr>
<td>A6</td>
<td>Dp</td>
<td>Second</td>
</tr>
<tr>
<td>A7</td>
<td>Dn</td>
<td>Second</td>
</tr>
<tr>
<td>A8</td>
<td>SBU1</td>
<td>Second</td>
</tr>
<tr>
<td>A9</td>
<td>VBUS</td>
<td>First</td>
</tr>
<tr>
<td>A10</td>
<td>SSRXn2</td>
<td>Second</td>
</tr>
<tr>
<td>A11</td>
<td>SSRXp2</td>
<td>Second</td>
</tr>
</tbody>
</table>

#### Pin Signal Mating Sequence

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Mating Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>GND</td>
<td>First</td>
</tr>
<tr>
<td>B2</td>
<td>SSTxp2</td>
<td>Second</td>
</tr>
<tr>
<td>B3</td>
<td>SSTxn2</td>
<td>Second</td>
</tr>
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</tr>
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<tr>
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<td>VBUS</td>
<td>First</td>
</tr>
<tr>
<td>B10</td>
<td>SSRXn2</td>
<td>Second</td>
</tr>
<tr>
<td>B11</td>
<td>SSRXp2</td>
<td>Second</td>
</tr>
</tbody>
</table>

#### SHELL GND

### Section A-A

#### Pin Signal Mating Sequence

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Mating Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>GND</td>
<td>First</td>
</tr>
<tr>
<td>A2</td>
<td>SSTxp1</td>
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<td>VBUS</td>
<td>First</td>
</tr>
<tr>
<td>A5</td>
<td>CC</td>
<td>Second</td>
</tr>
<tr>
<td>A6</td>
<td>Dp</td>
<td>Second</td>
</tr>
<tr>
<td>A7</td>
<td>Dn</td>
<td>Second</td>
</tr>
<tr>
<td>A8</td>
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<td>Second</td>
</tr>
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<td>A9</td>
<td>VBUS</td>
<td>First</td>
</tr>
<tr>
<td>A10</td>
<td>SSRXn2</td>
<td>Second</td>
</tr>
<tr>
<td>A11</td>
<td>SSRXp2</td>
<td>Second</td>
</tr>
</tbody>
</table>

#### SHELL GND

### Specifications

**Material**
- Insulator: High Temp. Plastic UL 94V-0, Black
- Shell: Stainless steel (T=0.25mm)
- Inner Ground Cover Shell: Stainless Steel (T=0.10mm)
- Mid Plate: Stainless Steel (T=0.10mm)

**Plating**
- Contact: 30µ" Gold over 50µ" min. Nickel
- Solder Tails: 80µ" min. Matte Tin over 50µ" min. Nickel
- Shell: 50µ" min. Nickel
- Inner Ground Cover Shell: 50µ" min. Nickel

**Electrical**
- Current Rating: 5.00A collectively for VBUS pins
  - 6.25A collectively for GND pins
  - 1.25A for B5 pin
  - 0.25A per pin for all other pins
- Voltage Rating: 20V DC
- Contact Resistance: 40mΩ max initial
  - 50mΩ max after test
- Dielectric Withstanding Voltage: 100V AC
- Insulation Resistance 100MΩ min

**Mechanical & Environmental**
- Operating Temperature: -40°C to 85°C
- Mating Force: 5 to 20 N.
- Unmated Force: 6 to 20 N after test
- Durability: 10,000 cycles

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- Insulator: High Temp. Plastic UL 94V-0, Black
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- Unmated Force: 6 to 20 N after test
- Durability: 10,000 cycles

### Ordering Grid

**Contact Plating**
- 30 = 30µ" Gold

**Packing Options**
- C = Tape & Reel with Cap
  - (enough per reel)

**Request Samples and Quotation**

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Recommended PCB Layout
as viewed from component side
Recommended PCB Thickness: 1.20mm  Tolerance: ±0.05mm

Solder Area  Component Outline

Mating View

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USB Type C Receptacle
Vertical, SMT with Shell Stakes & Locating Pegs

Part Number: USB4070C
Revision: C2
Drawing Date: 5th May 2016

Product Description:
USB4070C PCN

Units: Metric (mm)
Length Angle ± 2°

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www.gct.co
1. Material
Box: Fibreboard, corrugated, double wall.
Tape: Polystyrene, heat-resistant temperature: 120°C, Black colour.
Reel: Polystyrene, heat-resistant temperature: 70°C, Blue colour.
Bag: Polyethylene, heat-resistant temperature: 100°C.

2. Peeling strength: 0.1 ~ 1.3 N (10 ~ 130 grams)

3. Peeling speed: 300 mm/min.

4. Each bag includes desiccant.