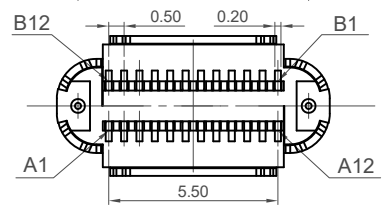
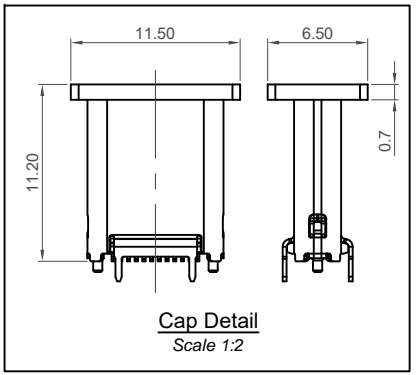
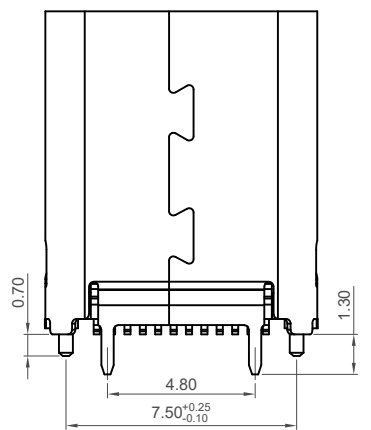
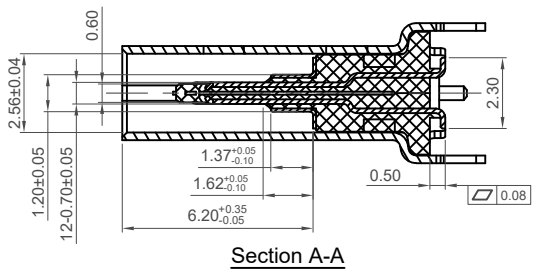
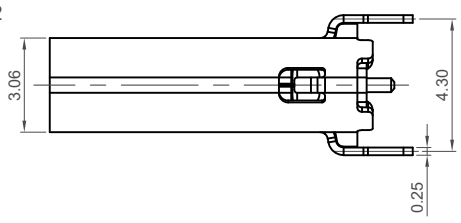
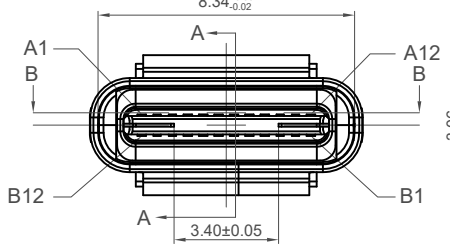
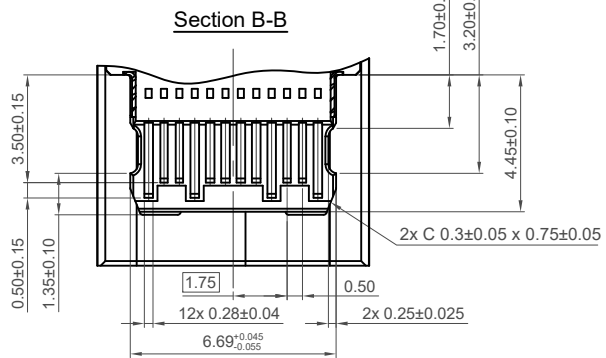


GCT USB4070 is designed and manufactured to be compatible with USB Type C specification latest release. Compliance testing for products conforming to the USB type-C cable and connector specification are currently under development by the USB-IF.



| Pin | Signal | Mating Sequence | Pin | Signal | Mating Sequence |
|-------|--------|-----------------|-------|--------|-----------------|
| A1 | GND | First | B12 | GND | First |
| A2 | SSTXp1 | Second | B11 | SSRXp1 | Second |
| A3 | SSTXn1 | Second | B10 | SSRXn1 | Second |
| A4 | Vbus | First | B9 | Vbus | First |
| A5 | CC1 | Second | B8 | SBU2 | Second |
| A6 | Dp1 | Second | B7 | Dn2 | Second |
| A7 | Dn1 | Second | B6 | Dp2 | Second |
| A8 | SBU1 | Second | B5 | CC2 | Second |
| A9 | Vbus | First | B4 | Vbus | First |
| A10 | SSRXn2 | Second | B3 | SSTXn2 | Second |
| A11 | SSRXp2 | Second | B2 | SSTXp2 | Second |
| A12 | GND | First | B1 | GND | First |
| SHELL | | GND | SHELL | | GND |

Specifications

Material

Insulator: High Temp. Plastic UL 94V-0, Black
 Contact: High Grade Copper Alloy (T=0.15mm)
 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
 Cover Shell: 80µ" min. Nickel
 Inner Ground Cover Shell: 50µ" min. Nickel

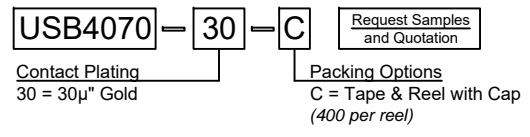
Electrical

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

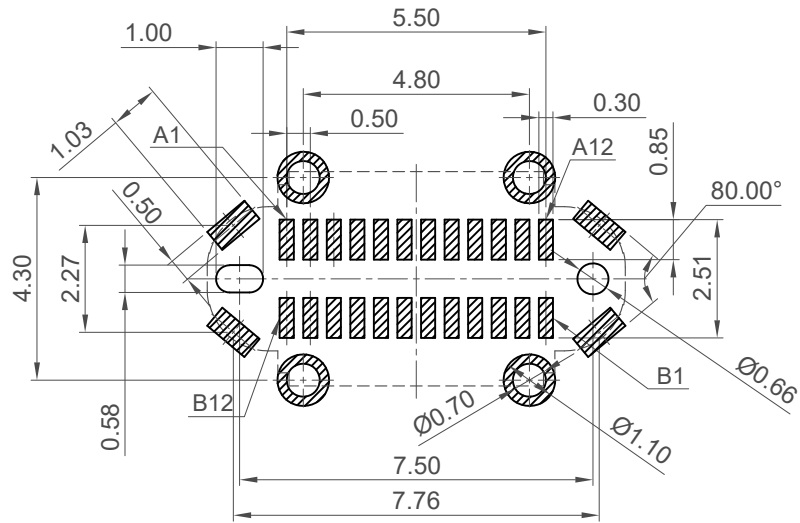
Mechanical & Environmental

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

Ordering Grid



| | | | | |
|------------------------------|------------------|--|---------------|---|
| Part Number USB4070 | | Product Description USB 3.2 Gen2 Type C Receptacle Vertical, SMT with Shell Stakes & Locating Pegs | | www.gct.co |
| Drawing Date 5th May 2016 | | | | |
| By CC | USB4070 C PCN | Tolerances (Except as Noted) Length X. ± 0.50 X.X ± 0.30 X.XX ± 0.20 X.XXX ± 0.10 | Angle ± 2° | Units: Metric (mm) |
| Detail | C5 | | | This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE |
| Revision | 16/07/21 | | | |

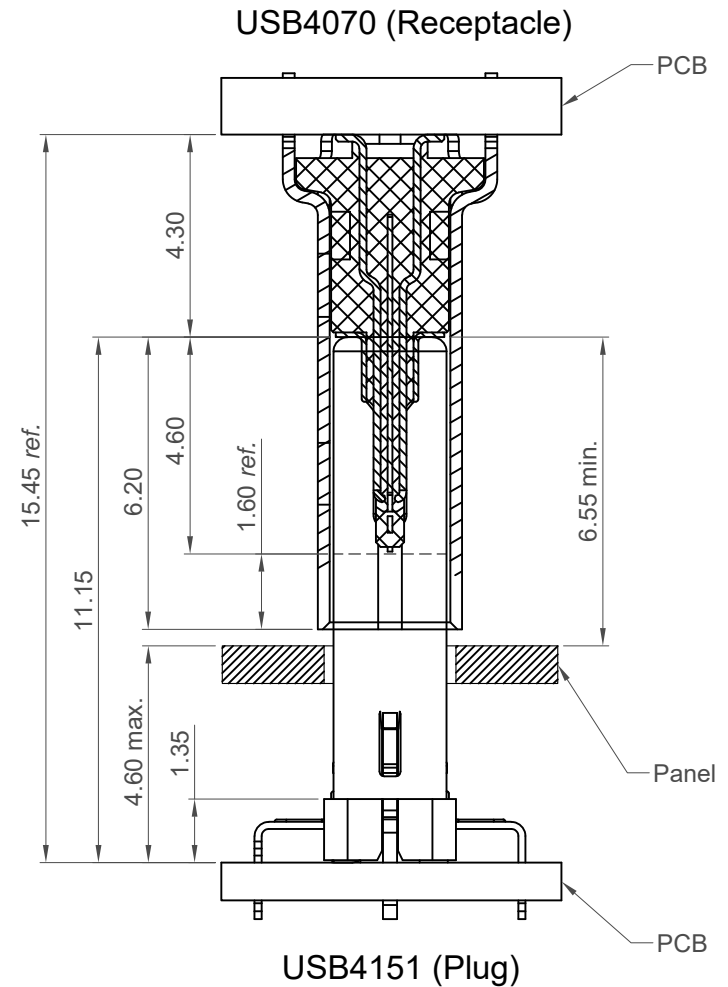
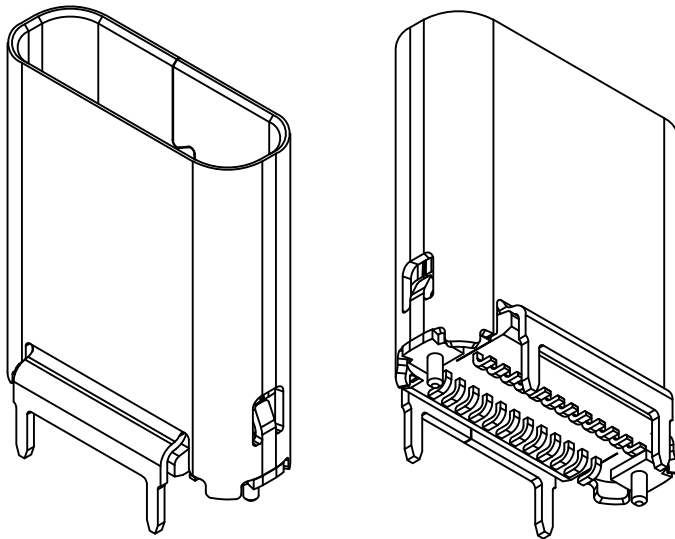


Recommended PCB Layout

as viewed from component side

Recommended PCB Thickness: 1.20mm Tolerance: $\pm 0.05\text{mm}$

Solder Area Component Outline



USB4151 (Plug)
Plug and Receptacle Mating View

| | | | | | | |
|--------------|------------------|---|-------------|------------------|--|-----------------------|
| Part Number | | Product Description | | | www.gct.co | |
| USB4070 | | USB 3.2 Gen2 Type C Receptacle | | | | |
| Drawing Date | | Vertical, SMT with Shell Stakes & Locating Pegs | | | | |
| 5th May 2016 | | | | | © This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE | |
| By | CC | Tolerances (Except as Noted) | | | | Units: Metric (mm) |
| Detail | USB4070 C PCN | Length | Angle | | | |
| Revision | C5 | X. ± 0.50 | ± 2° | | | |
| Date | 16/07/21 | X.X ± 0.30 | X.XX ± 0.20 | | | |
| | | X.XXX ± 0.10 | | Not to Scale | | |
| | | | | Drawn By AJO | | |
| | | | | Sheet No. 2/3 | | |

38.4
32.4

LABEL

Ø380

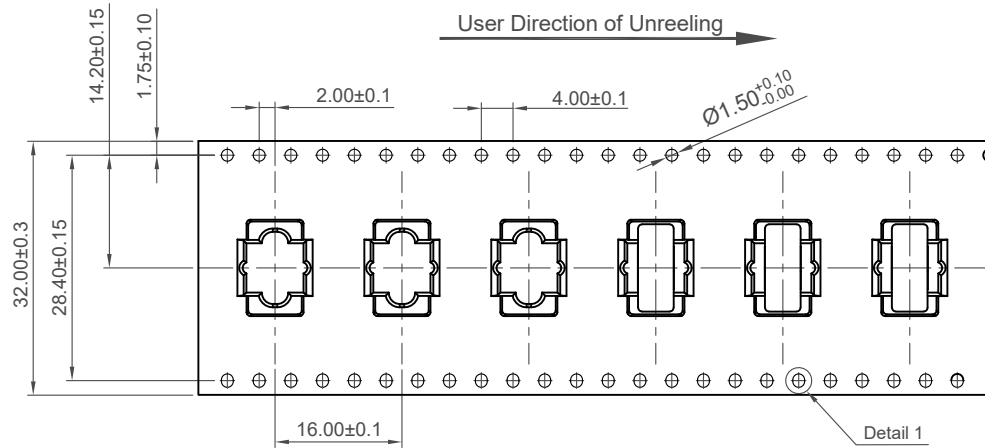
400 min.
Peeling Angle
165° ~ 180°

About 160mm long
Unloaded Section

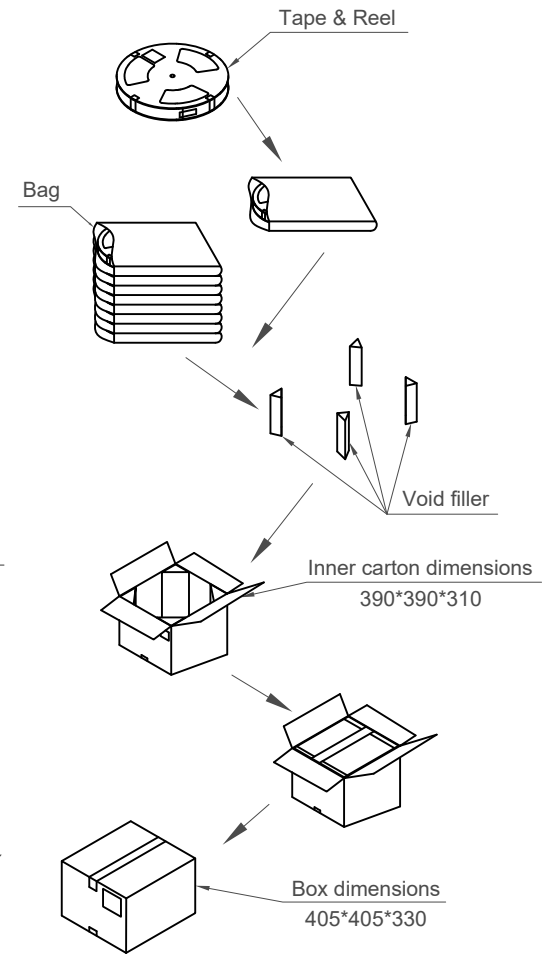
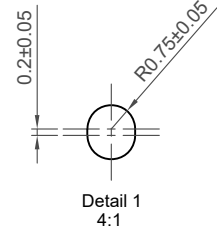
Product Loaded Section

About 160mm long
Unloaded Section

User Direction of Unreeling



13.50±0.1



Inner carton dimensions
390*390*310

Box dimensions
405*405*330

Note

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.

| Pcs / Reel | Reels / Carton | Total Quantity |
|------------|----------------|----------------|
| 400 | 8 | 3,200 pcs |

| | | | |
|------------------------------|--|--|----------|
| Part Number USB4070 | | Product Description USB 3.2 Gen2 Type C Receptacle Vertical, SMT with Shell Stakes & Locating Pegs | |
| Drawing Date 5th May 2016 | | | |
| By CC | Tolerances (Except as Noted) Length | Units: Metric (mm) | |
| Detail USB4070 C PCN | Angle | | |
| Revision C5 | | | |
| Date 16/07/21 | | | |

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GCT
www.gct.co

Not to Scale
Drawn By
AJO
Sheet No.
3/3

H
G
F
E
D
C
B
A

1 2 3 4 5 6 7 8