

Specifications

Material

Insulator: PA9T, UL 94V-0, Black  
 Contact: Copper Alloy  
 Mid Plate: Stainless Steel  
 EMI Plate: Stainless Steel  
 Shell: Stainless Steel

Plating

Contact  
 Contact Area: 3u" Au over 50µ" min. Nickel  
 Solder Tails: Gold Flash over 50µ" min. Nickel  
 Shell: 30µ" min. Nickel  
 Mid Plate: Clear  
 EMI Plate: Clear

Electrical

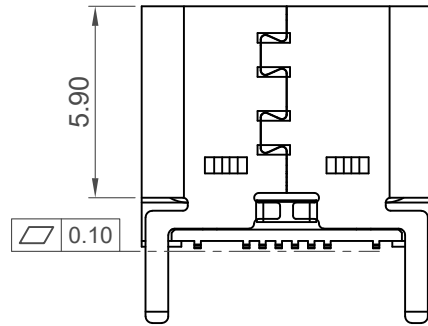
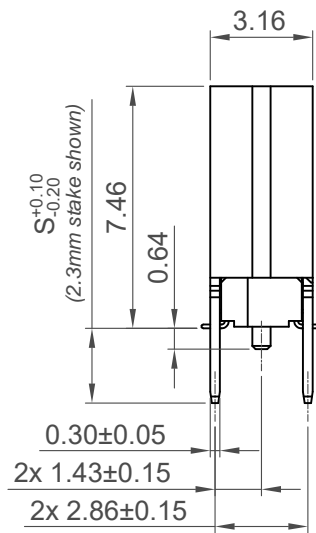
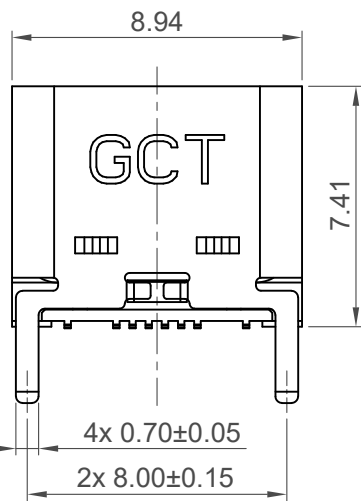
Current Rating: 5.00A collectively for Vbus pins  
 6.25A collectively for GND pins  
 1.25A for A5/B5 pin  
 0.25A per pin for all other pins

Voltage Rating: 20V DC  
 Contact Resistance: 40mΩ max initial.  
 50mΩ max after test

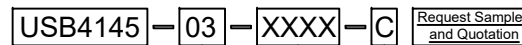
Dielectric Withstanding Voltage: 100V AC  
 Insulation Resistance 100MΩ min

Mechanical & Environmental

Operating Temperature: -25°C to +85°C  
 Mating Force: 5 to 20 N.  
 Unmated Force: 6 to 20 N after test  
 Durability: 20K cycles



Ordering Grid



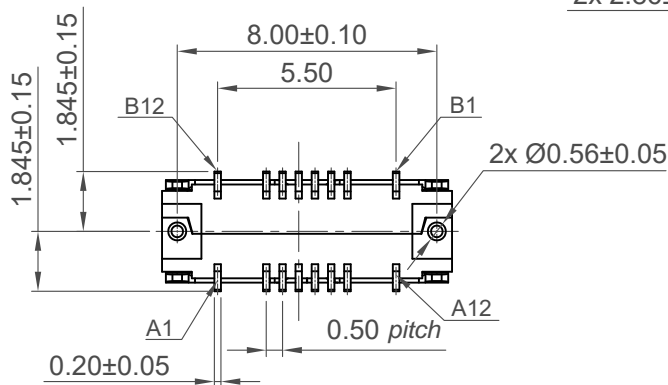
Contact Plating  
 03 = 3u" Gold

Packing Options

C = Tape & Reel with Cap

Shell Stake Length "S"

0070 = 0.70mm  
 0170 = 1.70mm  
 0230 = 2.30mm



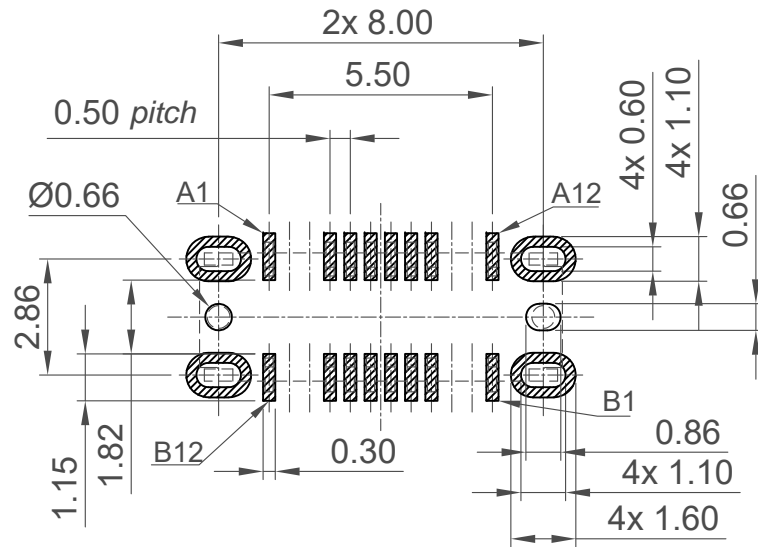
Part Number		Product Description	
USB4145		USB2.0 Type C Receptacle, Vertical, SMT, H=7.46mm, 16 Pin	
Drawing Date		28th June 2022	
By	CC	Tolerances (Except as Noted)	Units:
Detail	Drawing Release	Length	Metric (mm)
Revision	A	Angle	
Date	28/06/22	X.X ± 0.30	
		X.XX ± 0.20	
		X.XXX ± 0.10	



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**Recommended PCB Layout**

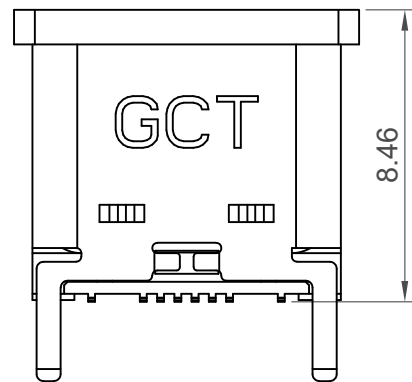
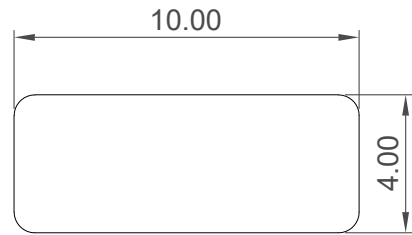
Tolerance:  $\pm 0.05\text{mm}$

Solder Area 
 Keep Out Area 
 Component Outline

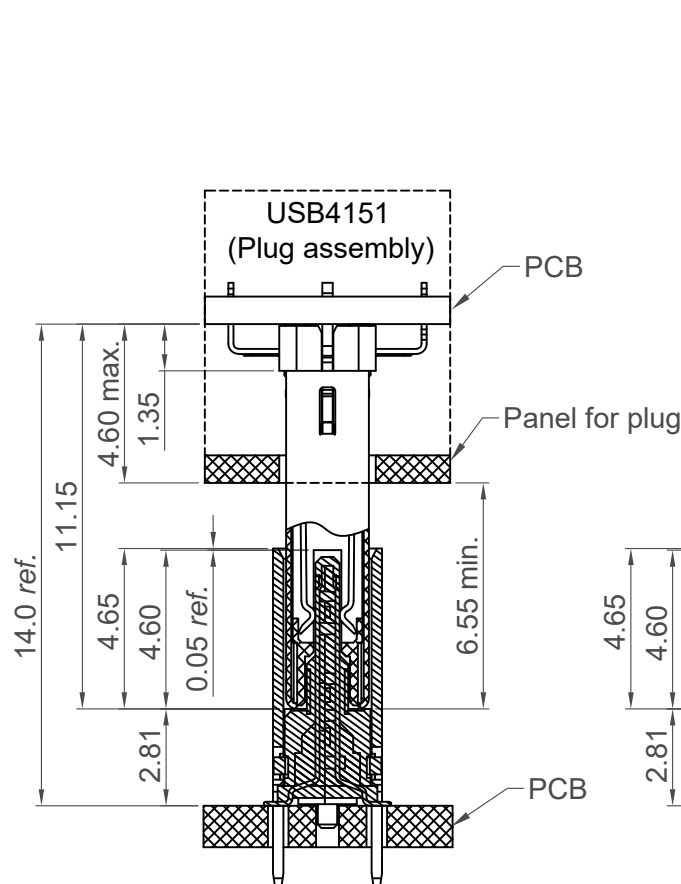
Pin	Signal	Mating Sequence	Pin	Signal	Mating Sequence
A1	GND	First	B12	GND	First
A4	V <sub>BUS</sub>	First	B9	V <sub>BUS</sub>	First
A5	CC1	Second	B8	SBU2	Second
A6	Dp1	Second	B7	Dn2	Second
A7	Dn1	Second	B6	Dp2	Second
A8	SBU1	Second	B5	CC2	Second
A9	V <sub>BUS</sub>	First	B4	V <sub>BUS</sub>	First
A12	GND	First	B1	GND	First
SHELL		GND	SHELL		GND

Part Number		Product Description			
USB4145		USB2.0 Type C Receptacle, Vertical, SMT, H=7.46mm, 16 Pin			
Drawing Date		28th June 2022			
By	CC	Tolerances (Except as Noted)		Units:	 
Detail	Drawing Release	Length	Angle	Metric (mm)	
Revision	A	X.X $\pm$ 0.30	-		
Date	28/06/22	X.XX $\pm$ 0.20			
		X.XXX $\pm$ 0.10			
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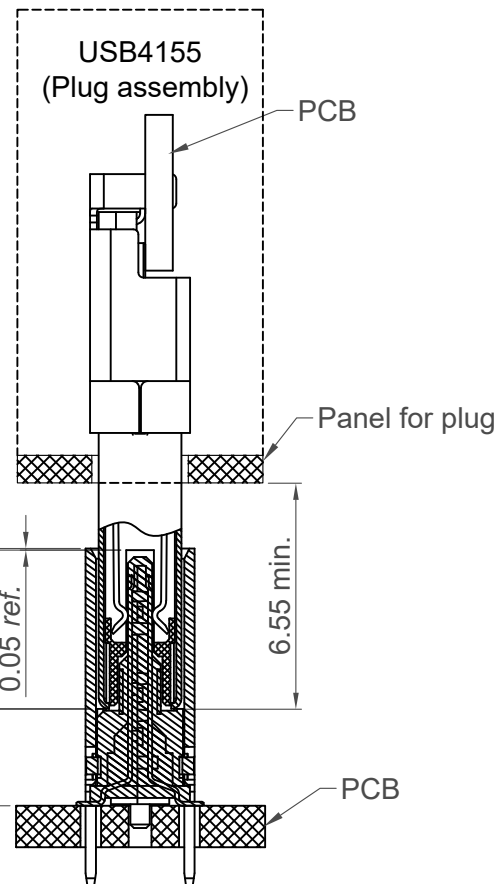




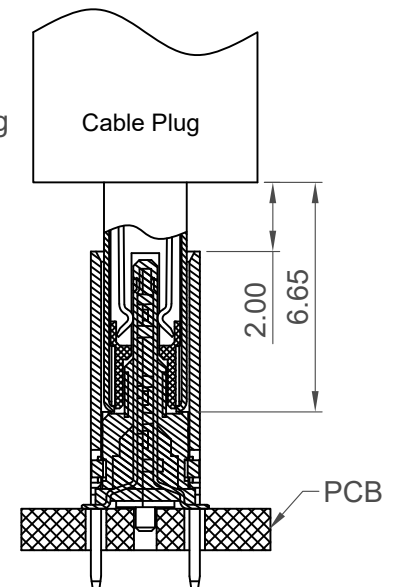
Cap Information



USB4145  
(Receptacle assembly)







USB4145  
(Receptacle assembly)

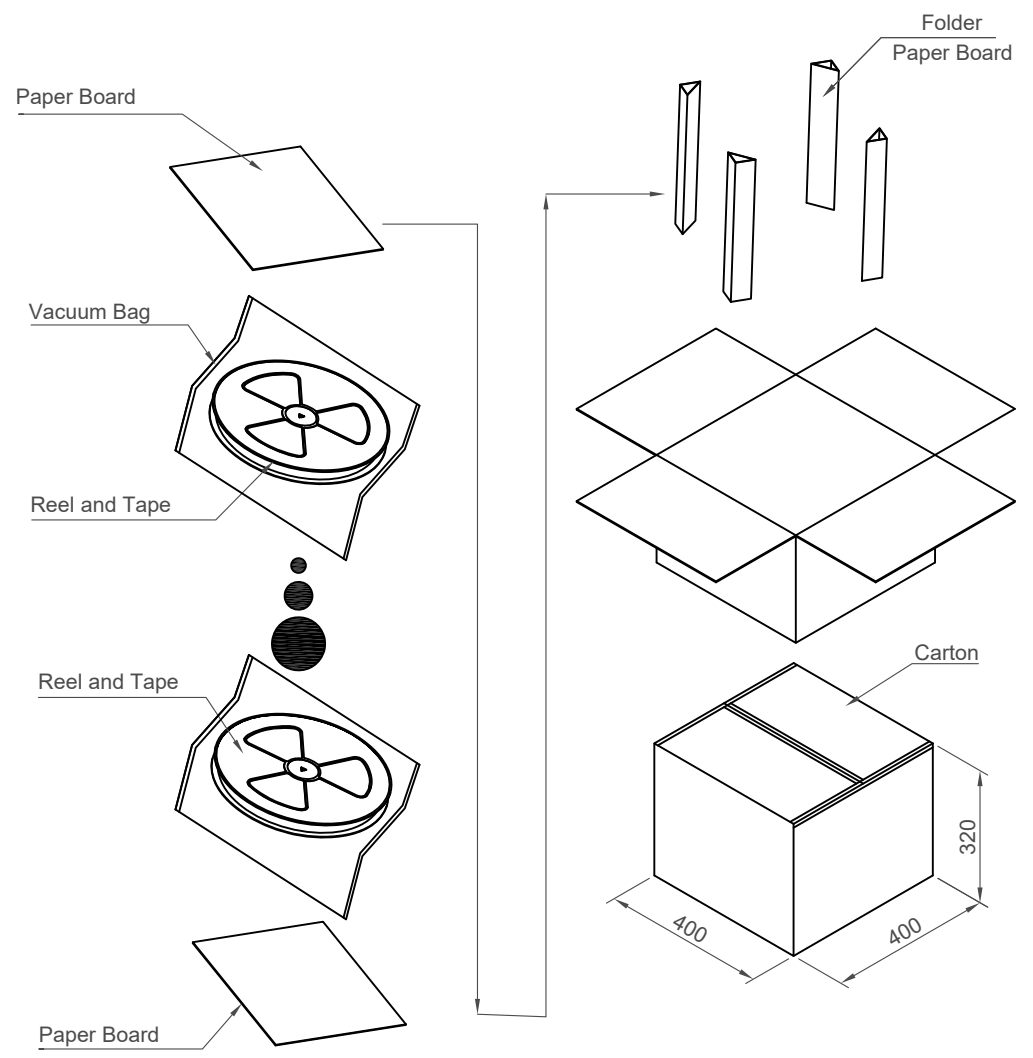
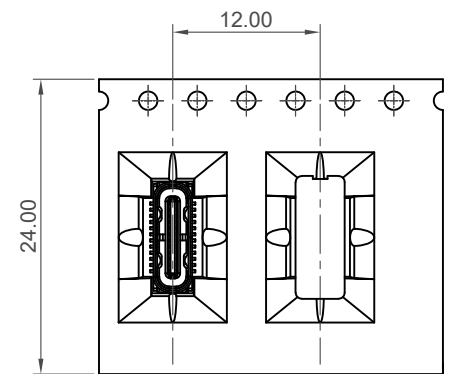
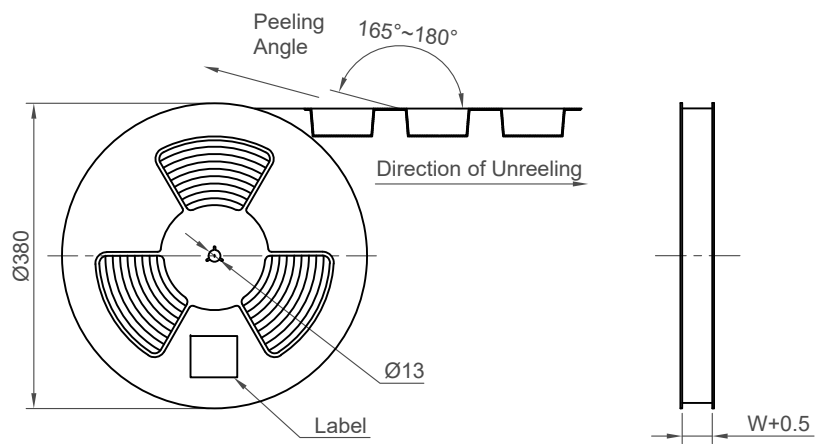
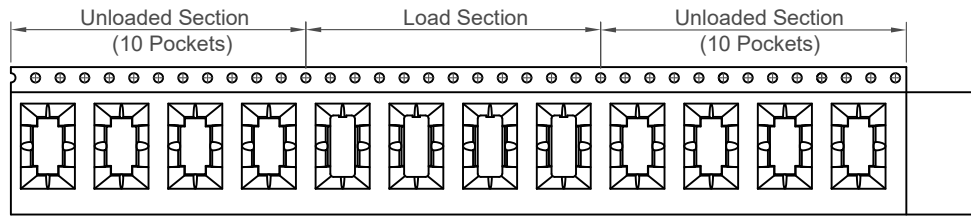


USB4145  
(Receptacle assembly)

Plug and Receptacle Mating View

Part Number		Product Description		 www.gct.co
USB4145		USB2.0 Type C Receptacle, Vertical, SMT, H=7.46mm, 16 Pin		
Drawing Date		28th June 2022		
By	CC	Tolerances (Except as Noted)	Units:	  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
Detail	Drawing Release	Length	Metric (mm)	
Revision	A	Angle	 3rd Angle Projection	
Date	28/06/22	X.X ± 0.30		
		X.XX ± 0.20		Not to Scale Drawn By CC
		X.XXX ± 0.10		

H  
G  
F  
E  
D  
C  
B  
A



Part Number	Pcs / Reel	Reels / Carton	Total Quantity
USB4145-03-0070-C	700	10	7,000 pcs
USB4145-03-0170-C	500	10	5,000 pcs
USB4145-03-0230-C	500	10	5,000 pcs

Part Number USB4145		Product Description USB2.0 Type C Receptacle, Vertical, SMT, H=7.46mm, 16 Pin	
Drawing Date 28th June 2022			
By CC	Tolerances (Except as Noted)	Units: Metric (mm)	
Detail Drawing Release	Length X.X ± 0.30	Angle -	
Revision A	X.XX ± 0.20		
Date 28/06/22	X.XXX ± 0.10		

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1 2 3 4 5 6 7 8