

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: 48V DC

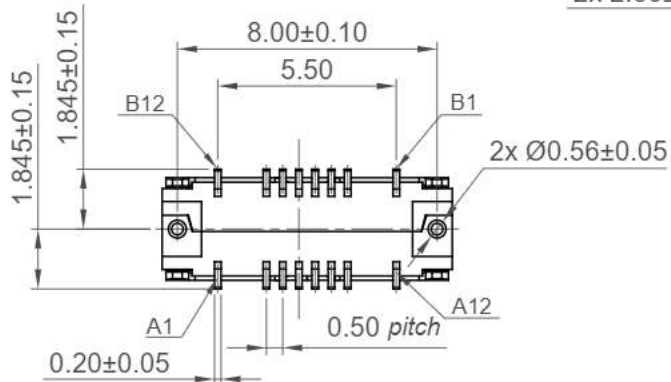
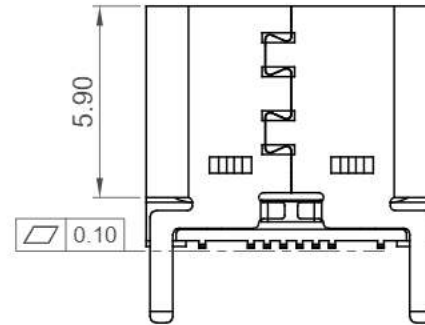
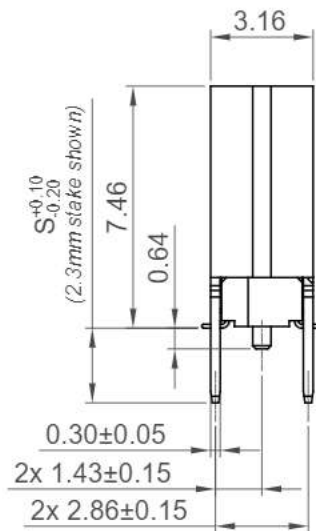
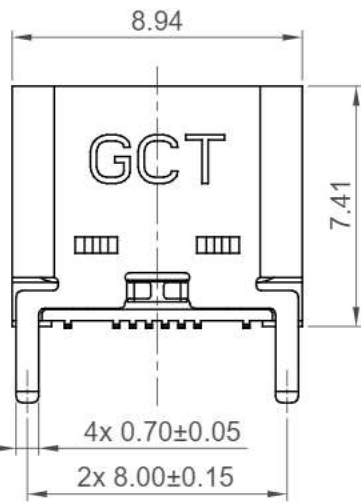
Power Rating: 240W

Contact Resistance: 40mΩ max initial.
 50mΩ max after test

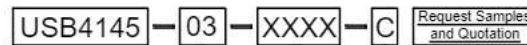
Dielectric Withstanding Voltage: 100V AC
 Insulation Resistance 100MΩ min

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

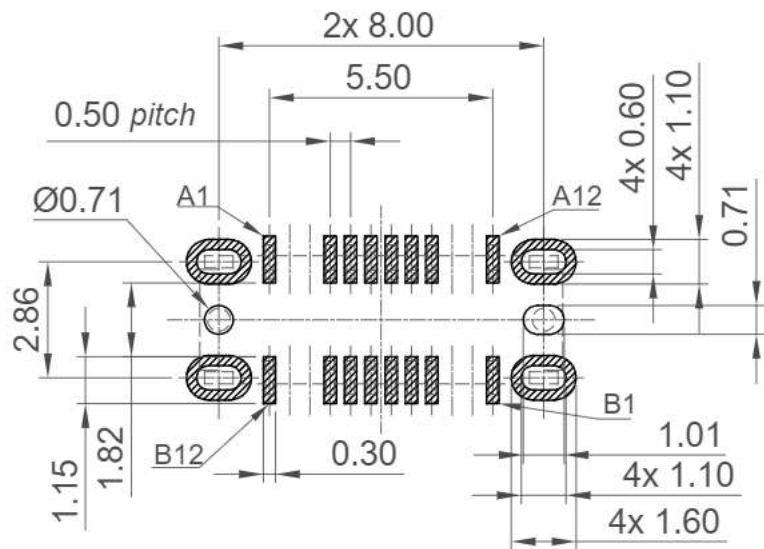
C = Tape & Reel with Cap

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	A2	Angle	
Date	31/01/23	X.X ± 0.30	
		X.XX ± 0.20	
		X.XXX ± 0.10	
		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	
Not to Scale	Drawn By	Sheet No.	
	CC	1/4	









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 _{bus}	First	B9	V _{bus}	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 _{bus}	First	B4	V _{bus}	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		Metric (mm)	
Revision	A2	Angle			
Date	31/01/23	X.X ± 0.30			
		X.XX ± 0.20		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	
		X.XXX ± 0.10			

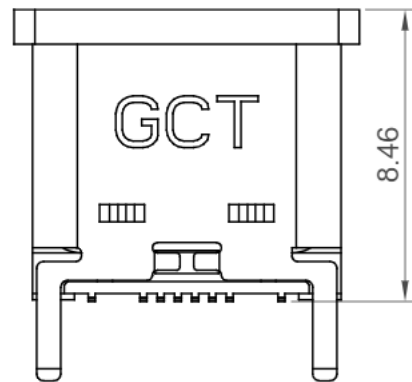


GCT
www.gct.co

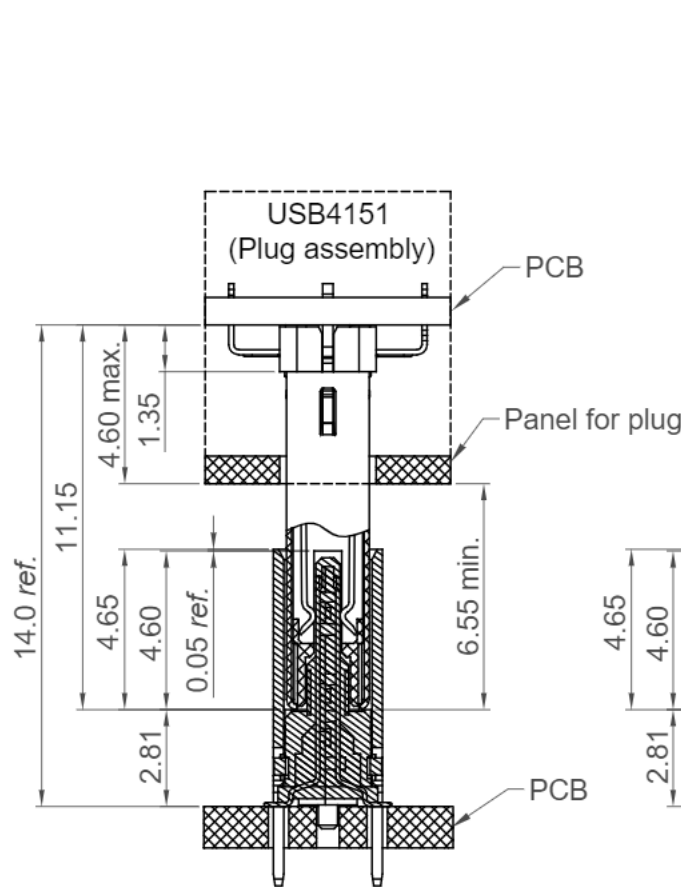
Not to Scale

Drawn By
CC

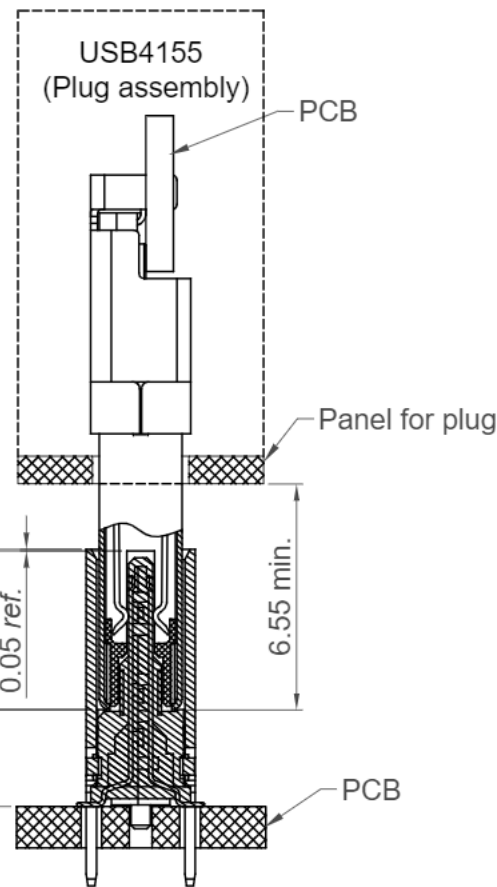
Sheet No.
2/4



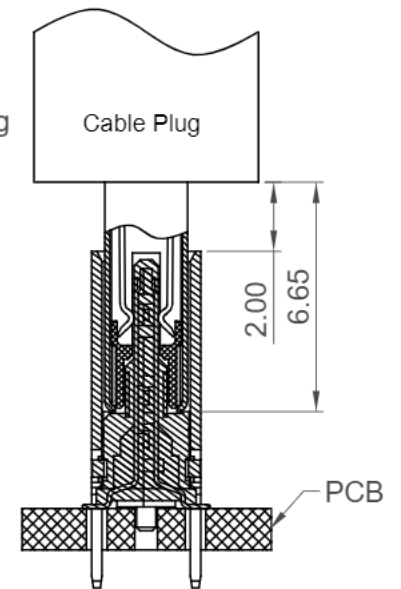
Cap Information



USB4145
(Receptacle assembly)







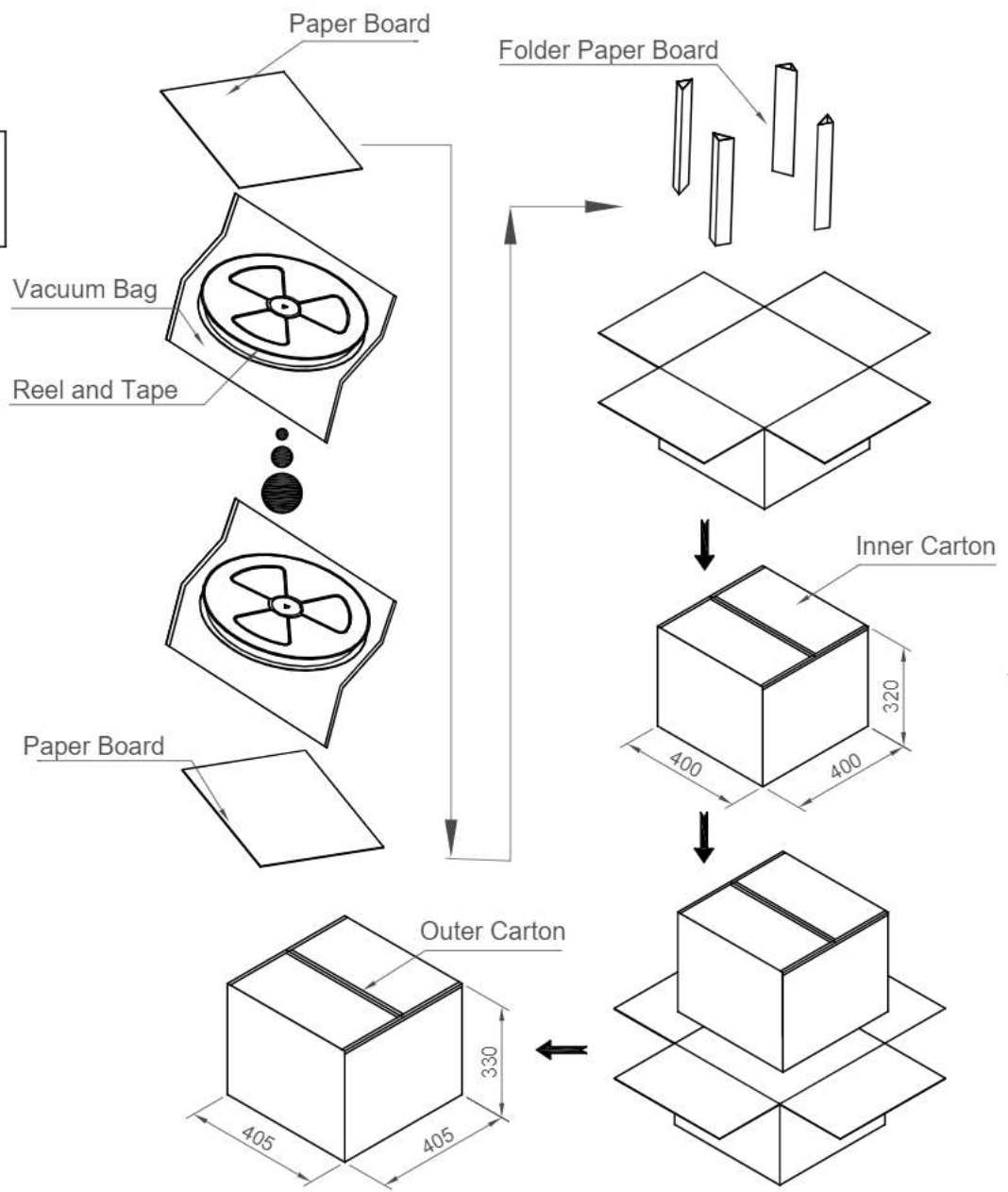
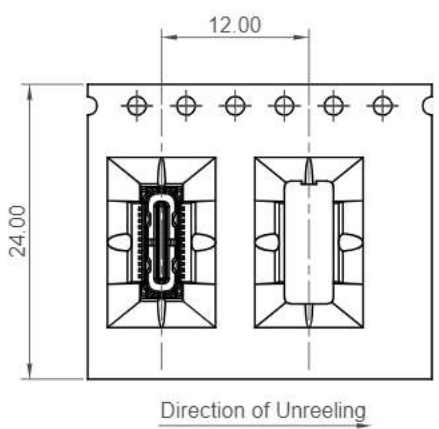
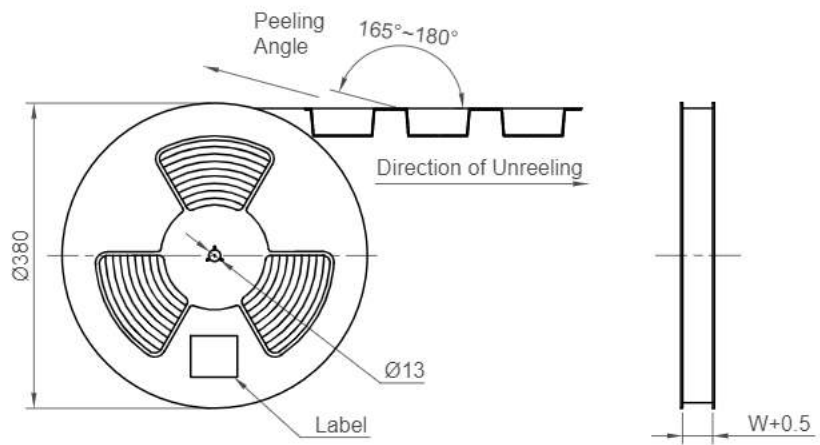
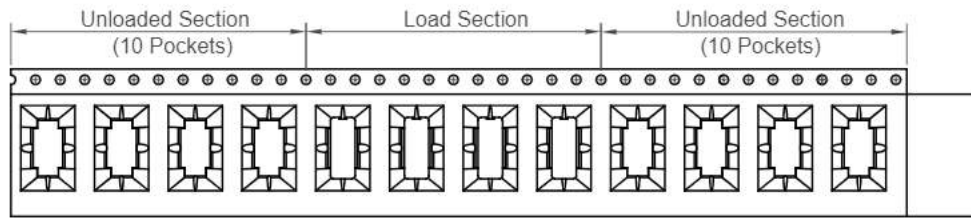
USB4145
(Receptacle assembly)



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	A2	X.X ± 0.30			
Date	31/01/23	X.XX ± 0.20 X.XXX ± 0.10			
Scale		Drawn By		Sheet No.	
Not to Scale		CC		3/4	



Part Number	Pcs / Reel	Reels / Carton	Total Quantity
USB4145-03-0070-C	700	10	7,000 pcs
USB4145-03-0170-C	600	10	6,000 pcs
USB4145-03-0230-C	600	10	6,000 pcs

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	A2	X.X ± 0.30	
Date	31/01/23	X.XX ± 0.20	
		X.XXX ± 0.10	

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



Not to Scale	Drawn By CC	Sheet No. 4/4
--------------	-------------	---------------