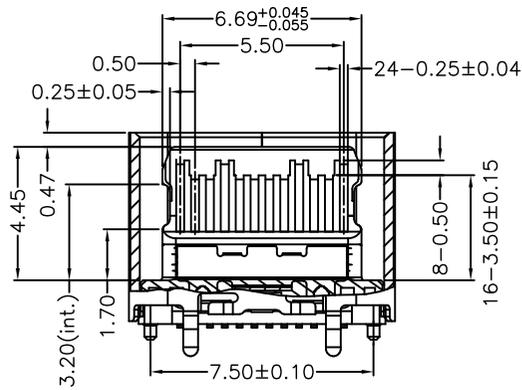
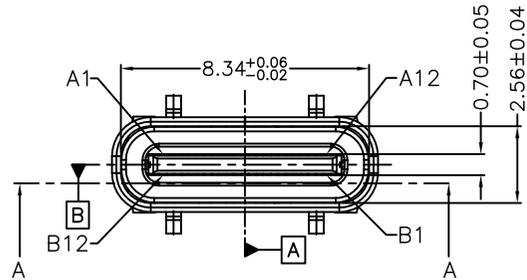


# GP Component

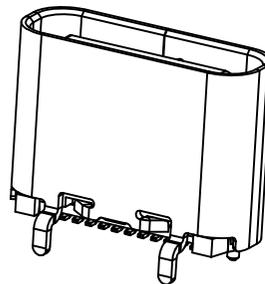
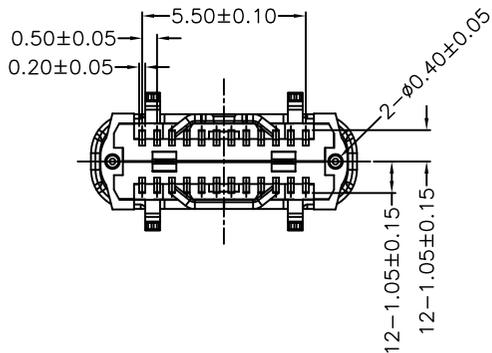
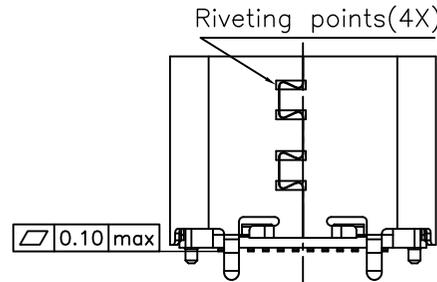
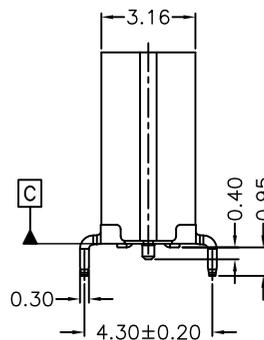
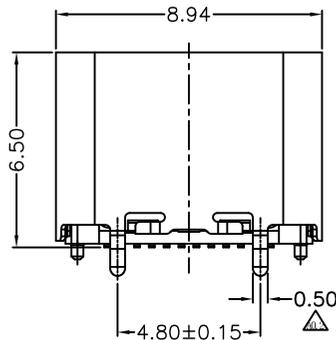
REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2019/07/25	Hanson
A0.1			Change Note	2020/08/27	Hanson
A0.2			Change	2023/12/19	Ken Lin



**SECTION A-A**  
SCALE 1:1

**NOTE:**

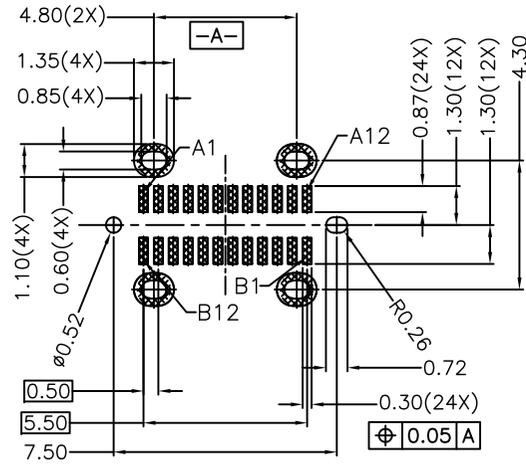
- MATERIAL SPECIFICATION:**
  - HOUSING: HIGH TEMPERATURE RESISTANT PLASTIC(LCP), UL94 V-0. COLOR: BLACK.
  - CONTACTS: COPPER ALLOY(C7025) T=0.12mm
  - MID PLATE: STAINLESS STEEL(SUS301) T=0.15mm
  - SHELL: STAINLESS STEEL(SUS304) T=0.30mm
- PLATING SPECIFICATION:**
  - CONTACTS: Ni 50u" MIN. UNDER PLATED OVER ALL. G/F PLATED ON THE MATING AREA OF CONTACT. Matt Sn PLATED ON THE SOLDER AREA.
  - SHELL: Ni 30u" MIN. UNDER PLATED OVER ALL.
  - MID PLATE: CLEAR ONLY
- MECHANICAL PERFORMANCE:**
  - INSERTION FORCE: 0.5~2.0kgf.
  - EXTRACTION FORCE: 0.8kgf~2.0kgf. 0.6kgf~2.0kgf. AFTER DURABILITY TEST.
  - DURABILITY: 10000 CYCLES.
- ELECTRICAL PERFORMANCE:**
  - CURRENT RATING: 5.0A VOLTAGE RATING: 5-20VDC  $\Delta$
  - LLCR: VBUS & GND PINS AND OTHER PINS: 40m $\Omega$ /PIN MAX. SHIELD: 50m $\Omega$ /MAX. LLCR MAX. CHANGE OF ALL PINS: 10m $\Omega$ .
  - INSULATION RESISTANCE: 100M $\Omega$  MIN
  - DIELECTRIC WITHSTAND VOLTAGE, AC 100V FOR 1 MINUTE.
- ENVIRONMENTAL PERFORMANCE:** OPERATING TEMPERATURE: -40°C~+85°C.  $\Delta$
- IR REFLOW:** THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.



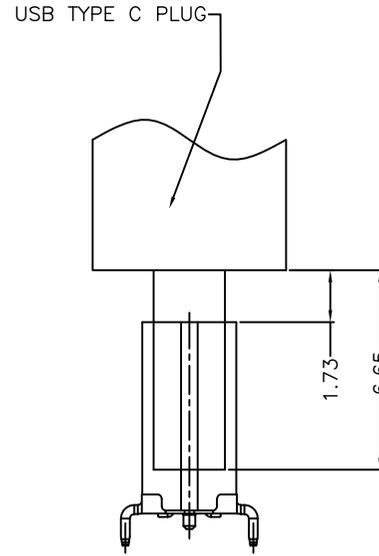
Matrix Electronics Co.,Ltd			
TOLERANCE: $\Delta$	DESIGN BY :	DATE :	PART NAME: $\Delta$
X:X ±0.38	Ken Lin	2023/12/19	USB3.2 Gen2 TYPE C FEMALE 24PIN VERTICAL TYPE SHELL H6.50mm
X:XX ±0.25	CHECKED BY:	DATE :	PART NO.
X:XXX ±0.15	Hanson Huang	2023/12/19	MUSB12-01-413
ANGLE: $\pm 2^\circ$	APPROVED BY1:	DATE :	MOLD NO.
$\oplus$ $\nabla$	Richard Hsieh	2023/12/19	NA
UNIT: mm [inch]	APPROVED BY2:	DATE :	DRAW NO.
SCALE: 1:1	Richard Hsieh	2023/12/19	SHEET NO.
SIZE: A4			1 OF 2

# GP Component

REV.	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGN
A0			Initial	2019/07/25	Hanson
A0.1			Change Note	2020/08/27	Hanson
A0.2			Change	2023/12/19	Ken Lin

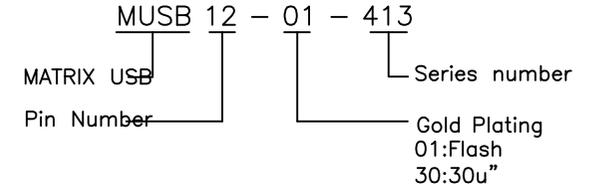


RECOMMENDED PCB LAYOUT(TOP VIEW)  
THICKNESS 0.8±0.10MM;DEFAULT TOLERANCE:±0.05



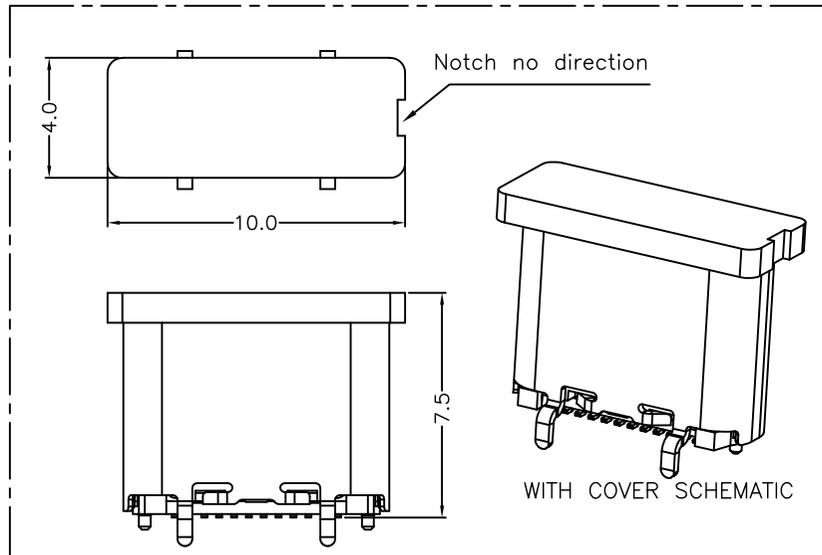
FEMALE AND MALE MATCHING DRAWING

MATRIX PART NO:



USB TYPE-C PIN ASSIGNMENTS

PIN NUMBER	SIGNAL NAME	PIN NUMBER	SIGNAL NAME
A1	GND	B12	GND
A2	SSTXp1	B11	SSRXp1
A3	SSTXn1	B10	SSRXn1
A4	Vbus	B9	Vbus
A5	CC1	B8	SBU2
A6	Dp1	B7	Dn2
A7	Dn1	B6	Dp2
A8	SBU1	B5	CC2
A9	Vbus	B4	Vbus
A10	SSRXn2	B3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND



WITH COVER SCHEMATIC

<b>Matrix Electronics Co.,Ltd</b>			
TOLERANCE: $\Delta$ X.X ±0.38 X.XX ±0.25 X.XXX ±0.15 ANGLE: ±2°	DESIGN BY : Ken Lin	DATE : 2023/12/19	PART NAME: USB3.2 Gen2 TYPE C FEMALE 24PIN VERTICAL TYPE SHELL H6.50mm
	CHECKED BY: Hanson Huang	DATE : 2023/12/19	
UNIT: mm [inch] SCALE:1:1 SIZE:A4	APPROVED BY1: Richard Hsieh	DATE : 2023/12/19	MOLD NO. NA
	APPROVED BY2: Richard Hsieh	DATE : 2023/12/19	DRAW NO. SHEET NO. 2 OF 2