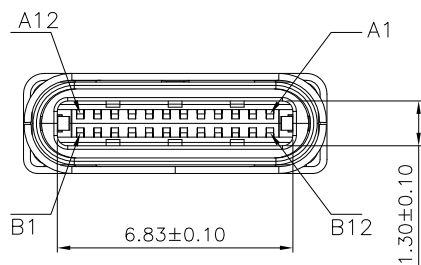
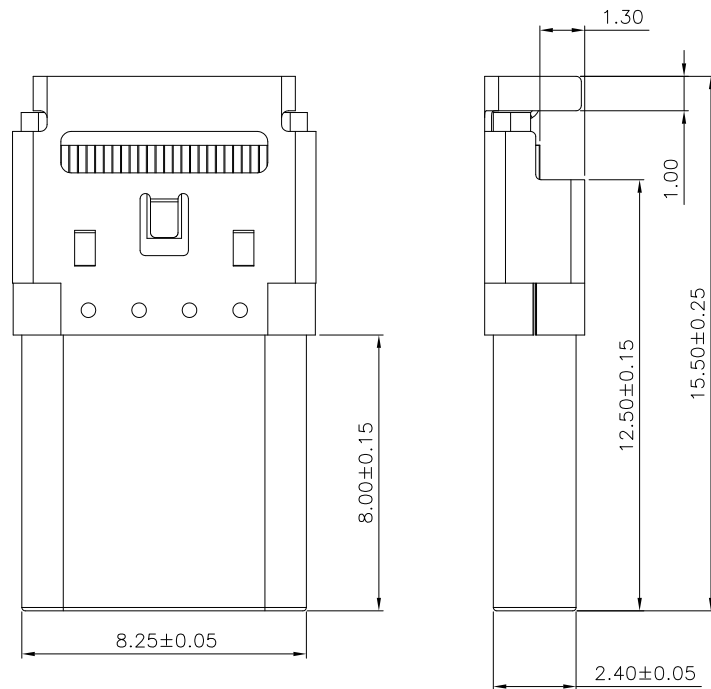
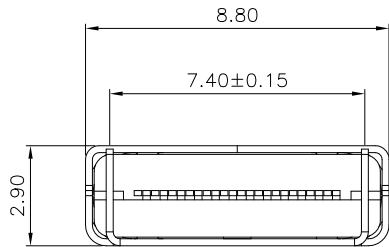


## GP Component

| REV. | ECN NO. | LOCATIONS | DESCRIPTION | DATE       | DESIGN   |
|------|---------|-----------|-------------|------------|----------|
| A0   |         |           | Initial     | 2017/02/23 | Phebe Su |



## NOTES:

## 1.MATERIAL:

MOLDING: LCP UL94 V-0 Black  
CONTACT: COPPER ALLOY. GOLD 1u" PLATED ON CONTACT AREA, 100u" Min TIN (LEAD FREE) ON SOLDER AREA,  
SHELL: SUS304-H, T=0.30±0.03mm  
50u" NICKEL PLATING OVER ALL.  
SHILD: SUS304-H, T=0.12±0.03mm

## 2.MECHANICAL:

INSERTION: 5~20N.  
EXTRACTION: 8~20N AFTER TEST.  
DURABILITY: 10000 CYCLES

## 3.ELECTRICAL:

CURRENT: 5A FOR VBUS;  
1.25A FOR GND PIN.  
0.25A FOR OTHER.

VOLTAGE: 20 V MAX

WITHSTANDING VOLTAGE: 100V AC R.M.S.

CONTACT RESISTANCE: 40mΩ MAX.

INSULATION RESISTANCE: 100MΩ MIN.

## 4.ENVIRONMENTAL

TEMPERATURE RANGE -40°C ~ +85°C

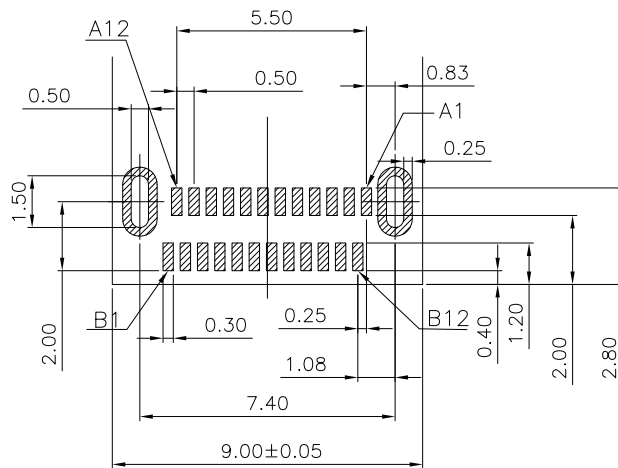
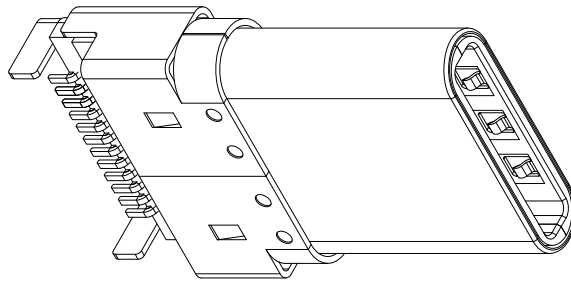
MATRIX PART NO:

MATRIX USB - 12 - 01 - 205  
Pin Number      Plating  
01:1u"  
15:15u"  
30:30u"

| NO                                                                                                               | VARIETY | QTY                            | METERIAL             | REMARK                                                               |
|------------------------------------------------------------------------------------------------------------------|---------|--------------------------------|----------------------|----------------------------------------------------------------------|
|  Matrix Electronics Co.,Ltd |         |                                |                      |                                                                      |
| TOLERANCE:<br>X:X ±0.25<br>X:XX ±0.15<br>X:XXX ±0.05<br>ANGLE: ±3°                                               |         | DESIGN BY :<br>Phebe Su        | DATE :<br>2017/02/23 | PART NAME:<br>USB 3.1 TYPE C Gen 2 Plug<br>R/A, Offset Type, CL 0.15 |
| CHECKED BY:<br>Ray Hsieh                                                                                         |         | DATE :<br>2017/02/23           | PART NO.             | MUSB12-01-205                                                        |
| APPROVED BY1:<br>Richard Hsieh                                                                                   |         | DATE :<br>2017/02/23           | MOLD NO.             | NA                                                                   |
| UNIT: mm [inch]                                                                                                  |         | APPROVED BY2:<br>Richard Hsieh | DATE :<br>2017/02/23 | DRAW NO.                                                             |
| SCALE:1:1 SIZE:A4                                                                                                |         |                                |                      | SHEET NO. 1 OF 2                                                     |

## GP Component

| REV. | ECN NO. | LOCATIONS | DESCRIPTION | DATE       | DESIGN   |
|------|---------|-----------|-------------|------------|----------|
| A0   |         |           | Initial     | 2017/02/23 | Phebe Su |



RECOMMENDED P.C.B. LAYOUT (T:1.00mm)  
TOLERANCE UNSPECIFIED ±0.05mm

## USB TYPE-C FULL-FEATURED RECEPTACLE INTERFACE PIN ASSIGNMENTS

| PIN | Signal Name | Description                                               | PIN | Signal Name | Description                                               |
|-----|-------------|-----------------------------------------------------------|-----|-------------|-----------------------------------------------------------|
| A1  | GND         | Ground return                                             | B12 | GND         | Ground return                                             |
| A2  | SSTXp1      | Positive half of first SuperSpeed TX differential pair    | B11 | SSRXp1      | Positive half of first SuperSpeed RX differential pair    |
| A3  | SSTXn1      | Negative half of first SuperSpeed TX differential pair    | B10 | SSRXn1      | Negative half of first SuperSpeed RX differential pair    |
| A4  | VBUS        | Bus Power                                                 | B9  | VBUS        | Bus Power                                                 |
| A5  | CC1         | Configuration Channel                                     | B8  | SBU2        | Sideband Use (SBU)                                        |
| A6  | Dp1         | Positive half of the USB 2.0 differential pair-Position 1 | B7  | Dn2         | Negative half of the USB 2.0 differential pair-Position 2 |
| A7  | Dn1         | Negative half of the USB 2.0 differential pair-Position 1 | B6  | Dp2         | Positive half of the USB 2.0 differential pair-Position 2 |
| A8  | SBU1        | Sideband Use(SBU)                                         | B5  | CC2         | Configuraaion Channel                                     |
| A9  | VBUS        | Bus Power                                                 | B4  | VBUS        | Bus Power                                                 |
| A10 | SSRXn2      | Negative half of second SuperSpeed RX differential pair   | B3  | SSTXn2      | Negative half of second SuperSpeed TX differential pair   |
| A11 | SSRXp2      | Positive half of second SuperSpeed RX differential pair   | B2  | SSTXp2      | Positive half of second SuperSpeed TX differential pair   |
| A12 | GND         | Ground return                                             | B1  | GND         | Ground return                                             |

| NO                                                                                                               | VARIETY | QTY                            | METERIAL             | REMARK                                                               |
|------------------------------------------------------------------------------------------------------------------|---------|--------------------------------|----------------------|----------------------------------------------------------------------|
|  Matrix Electronics Co.,Ltd |         |                                |                      |                                                                      |
| TOLERANCE:<br>X:X ±0.25<br>X:XX ±0.15<br>X:XXX ±0.05<br>ANGLE: ±3°                                               |         | DESIGN BY :<br>Phebe Su        | DATE :<br>2017/02/23 | PART NAME:<br>USB 3.1 TYPE C Gen 2 Plug<br>R/A, Offset Type, CL 0.15 |
| CHECKED BY:<br>Ray Hsieh                                                                                         |         | DATE :<br>2017/02/23           | PART NO.             | MUSB12-01-205                                                        |
| APPROVED BY1:<br>Richard Hsieh                                                                                   |         | DATE :<br>2017/02/23           | MOLD NO.             | NA                                                                   |
| UNIT: mm [inch]                                                                                                  |         | APPROVED BY2:<br>Richard Hsieh | DATE :<br>2017/02/23 | DRAW NO.                                                             |
| SCALE:1:1 SIZE:A4                                                                                                |         |                                |                      | SHEET NO.<br>2 OF 2                                                  |