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SPECIFICATIONS:

**MATERIAL:**  
Insulator: Thermoplastic, Black  
Contacts: Brass  
Shell: Stainless Steel

**Contact PLATING:**  
Underplate: 80µ"~ 160µ" Nickel  
Contact area: 30µ" Pd-Ni +2µ" Selective Gold  
Solder Tails area: 100µ" ~ 200µ" Tin (Lead Free)

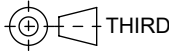
**ELECTRICAL:**  
Operation Voltage: 20V  
Current Rating:5 Amps (max)  
Insulation resistance: 100 Mohms min@ 100 VDC  
Dielectric Withstanding Voltage: 100 VAC/ minute  
Temperature Range: -40°C TO +105°C  
Mating Cycles: 10,000 Insertions.

DESCRIPTIONS:

1. Type: SMT +DIP Type
2. ROHS2 (Matte)(Halogen Free)
3. Contact Number: 24 Pins.
4. Contact Type: Female (LCP)
5. Apply Type: Socket
6. Shell Plating: Nickel
7. Standard ( PCB 1.0 mm)
8. Packaging: Tape & Reel
9. Insulator Color: Black.
10. DIM-A: 1.50 mm

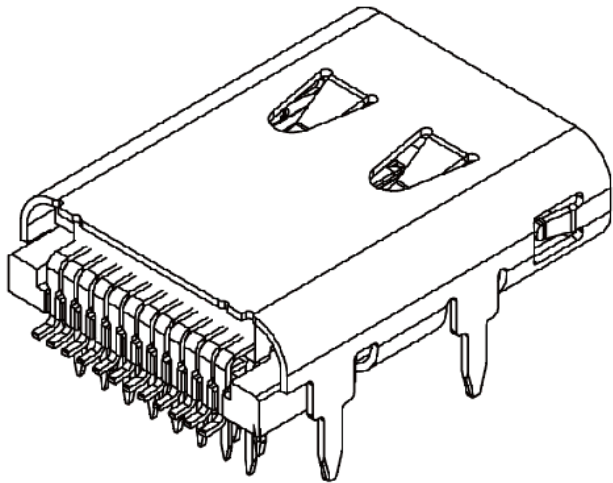
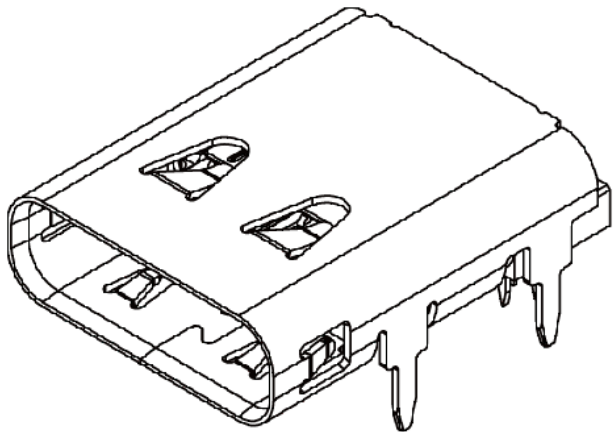
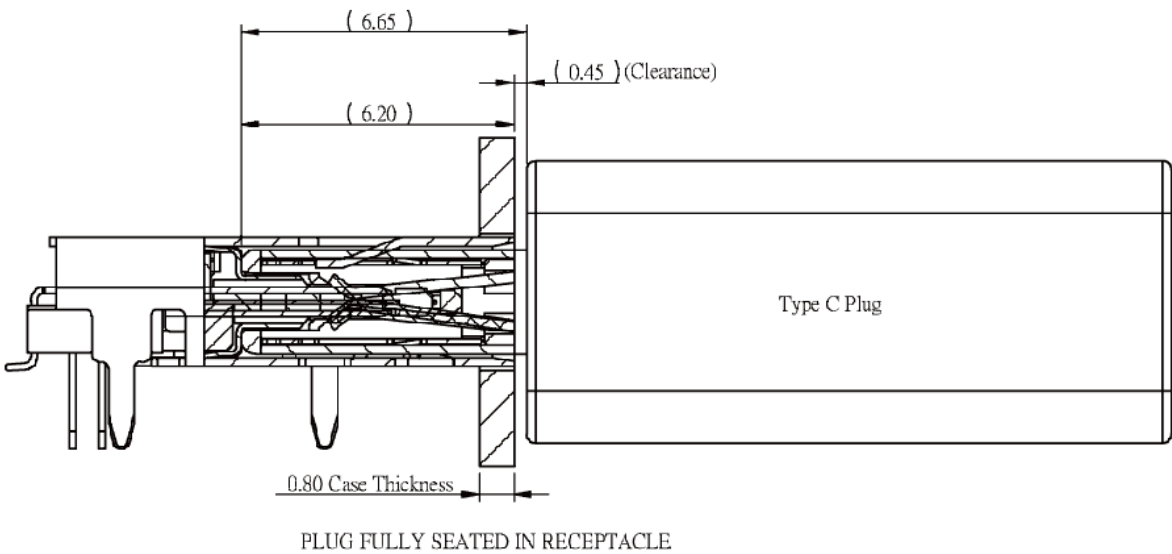
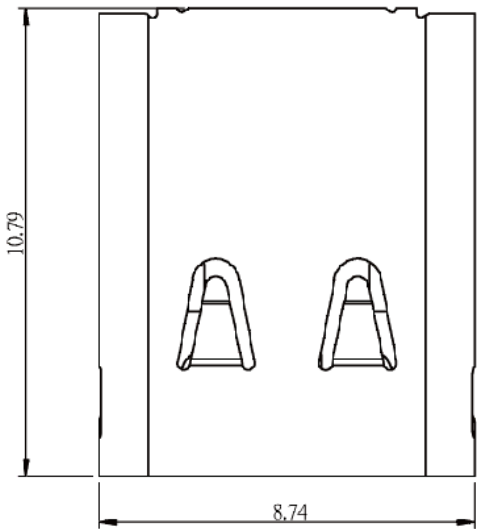
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RoHS compliant acc. to directive 2011/65/EU

|                                                                                                                  |  |                      |                      |             |            |                                                                                             |  |
|------------------------------------------------------------------------------------------------------------------|--|----------------------|----------------------|-------------|------------|---------------------------------------------------------------------------------------------|--|
| Unless otherwise specified :<br>Dimensions are in millimeters<br>ANG. ± 5°<br>0. ±0.50<br>.0 ±0.30<br>.00 ±0.20  |  | REV.                 | REVISION DESCRIPTION | INITIALS    | REV. DATE  |        |  |
|                                                                                                                  |  | △                    |                      |             |            |                                                                                             |  |
| Order / Article No. 24-02752                                                                                     |  | D                    | Drawing updated      | MEZ         | 31.10.2016 | CLASSIFICATION: USB3.1, C type<br>SMT/TH Version, female, 90°<br>TITLE: USB-3.1-C-ST9-AL-TR |  |
|                                                                                                                  |  | C                    | dim. updated         | SLS         | 02.03.2016 |                                                                                             |  |
| NOTES:                                                                                                           |  | B                    | Drawing updated      | MEZ         | 10.09.2015 | DWG NO.: Customer-P(028)A143                                                                |  |
|                                                                                                                  |  | A                    | Drawing updated      | MEZ         | 30.07.2015 |                                                                                             |  |
| ANGLE PROJECTION:<br> THIRD |  | DO NOT SCALE DRAWING |                      | NAME        | DATE       | REVISION: D                                                                                 |  |
|                                                                                                                  |  | DESIGN               | MEZ                  | 09.12.2014  |            |                                                                                             |  |
| WEIGHT:                                                                                                          |  | DRAWN                | MEZ                  | 31.10.2016  |            | SCALE: None                                                                                 |  |
|                                                                                                                  |  | CHECKED              | SLS                  | 31.10.2016  |            |                                                                                             |  |
|                                                                                                                  |  |                      |                      | SHEET1 OF 4 |            | A3 - ASSEMBLY                                                                               |  |

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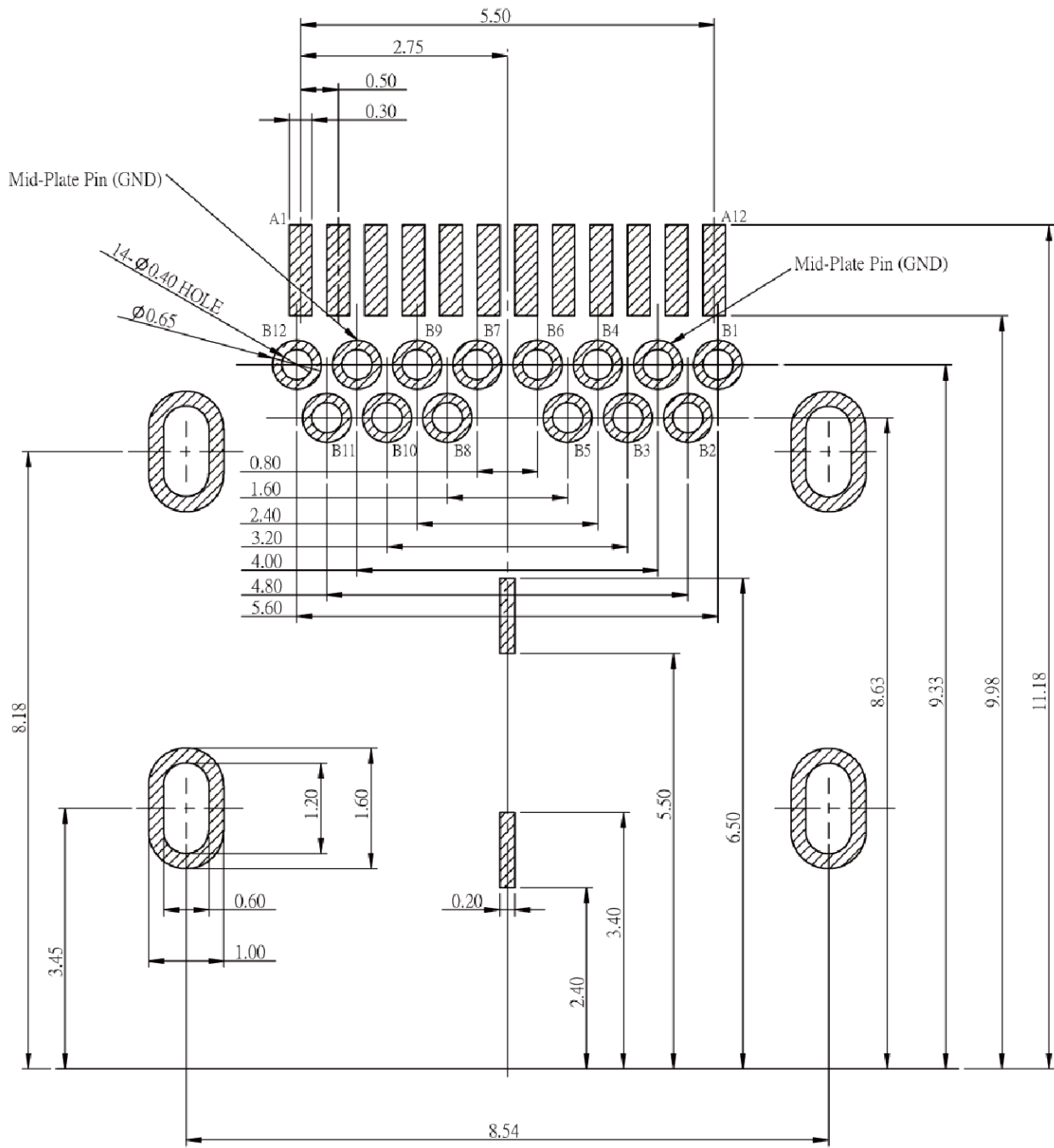
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|                                                                                                                                         |  |                   |  |                      |  |          |  |                                |  |                                                                                                                          |  |                |  |               |  |
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|                                                                                                                                         |  | △                 |  |                      |  |          |  |                                |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  | D                 |  | Drawing updated      |  | MEZ      |  | 31.10.2016                     |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  | C                 |  | dim. updated         |  | SLS      |  | 02.03.2016                     |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  | B                 |  | Drawing updated      |  | MEZ      |  | 10.09.2015                     |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  | A                 |  | Drawing updated      |  | MEZ      |  | 30.07.2015                     |  |                                                                                                                          |  |                |  |               |  |
| Order / Article No. 24-02752                                                                                                            |  |                   |  | DO NOT SCALE DRAWING |  |          |  | CLASSIFICATION: USB3.1, C type |  |                                                                                                                          |  |                |  |               |  |
| NOTES:                                                                                                                                  |  | ANGLE PROJECTION: |  |                      |  | NAME     |  | DATE                           |  | SMT/TH Version, female, 90°                                                                                              |  |                |  |               |  |
|                                                                                                                                         |  |                   |  | DESIGN               |  | MEZ      |  | 09.12.2014                     |  | TITLE:<br>USB-3.1-C-ST9-AL-TR                                                                                            |  |                |  |               |  |
|                                                                                                                                         |  |                   |  | DRAWN                |  | MEZ      |  | 31.10.2016                     |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  |                   |  | CHECKED              |  | SLS      |  | 31.10.2016                     |  |                                                                                                                          |  |                |  |               |  |
|                                                                                                                                         |  |                   |  |                      |  |          |  |                                |  | DWG NO.:<br>Customer-P(028)A143                                                                                          |  | REVISION:<br>D |  |               |  |
| WEIGHT:                                                                                                                                 |  |                   |  |                      |  |          |  |                                |  | SCALE: None                                                                                                              |  | SHEET2 OF 4    |  | A3 - ASSEMBLY |  |

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Recomanded PCB LAYOUT  
TOLANCE  $\pm 0.05$   
PCB Tinkness = 1.0 For 1.50 Solder tail  
1.6 For 1.90 Solder tail

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         |

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| NOTES:                                                                                                                                  |  | DO NOT SCALE DRAWING |                      |          |            | SMT/TH Version, female, 90°    |             |
|                                                                                                                                         |  | ANGLE PROJECTION:    | DESIGN               | NAME     | DATE       | TITLE: USB-3.1-C-ST9-AL-TR     |             |
|                                                                                                                                         |  |                      | DRAWN                | MEZ      | 31.10.2016 | DWG NO.: Customer-P(028)A143   |             |
|                                                                                                                                         |  |                      | CHECKED              | SLS      | 31.10.2016 | REVISION: D                    |             |
| WEIGHT:                                                                                                                                 |  |                      |                      |          |            | SCALE: None                    | SHEET3 OF 4 |
|                                                                                                                                         |  |                      |                      |          |            | A3 - ASSEMBLY                  |             |

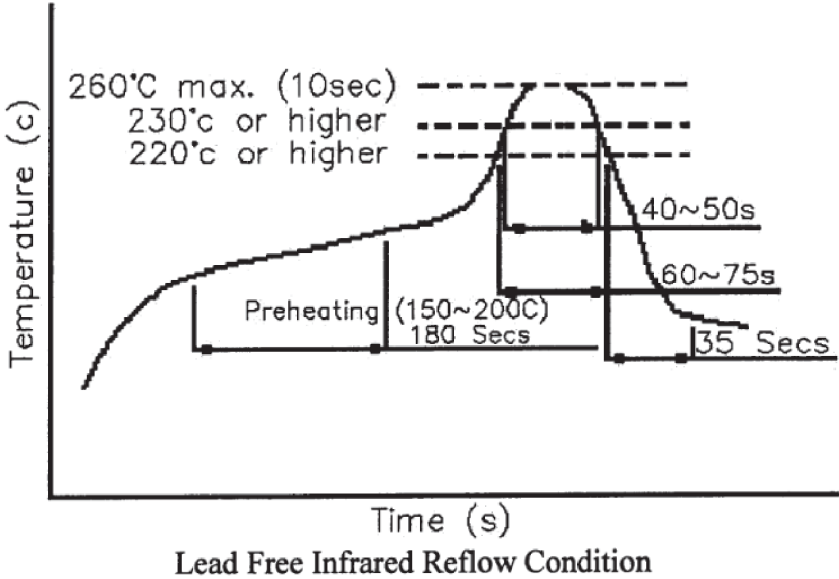
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SOLDERBILITY

| Test                         | Test criteria                                                             | Test procedure                                                                                                                                                                                                          |
|------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resistance to Soldering Heat | Without deformation of case or excessive looseness of the terminals(pin). | Temperature Endurance Connector must be able to endure 3 pass with profile of peak temperature at 260°C for 10sec above, and Time above liquid (>217°C) for more than 60 sec. (It is temperature at component surface). |
| Solder ability               | 95% of immersed area must show no voids,Pinholes                          | Dip solder tails into the molten solder (held at 245±5°C) up to 0.5mm from the tip of tails for 3±0.5sec)                                                                                                               |



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|                                                               |  |                      | DRAWN                | MEZ      | 31.10.2016 | DWG NO.: Customer-P(028)A143   |               |
|                                                               |  |                      | CHECKED              | SLS      | 31.10.2016 |                                |               |
| WEIGHT:                                                       |  |                      |                      |          |            | SCALE: None                    | REVISION: D   |
|                                                               |  |                      |                      |          |            | SHEET4 OF 4                    | A3 - ASSEMBLY |

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