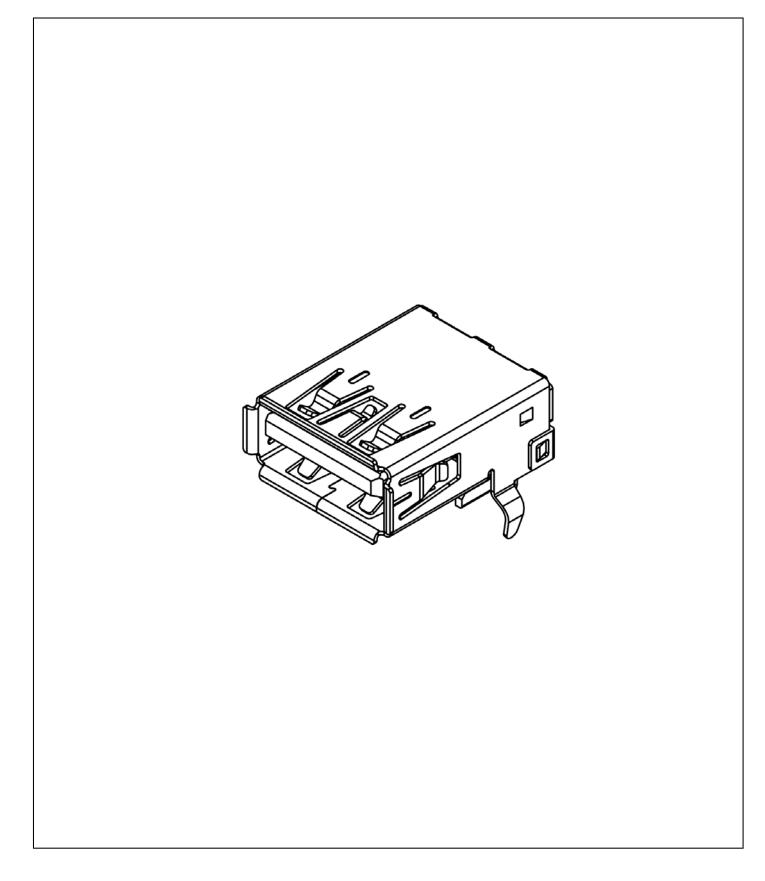
| Part<br>Number      | USB1135                            |              | Rev          | Rev A   |    | Date     | 26/06/20 |
|---------------------|------------------------------------|--------------|--------------|---------|----|----------|----------|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Througl | h Hole, Hori | zontal  |    | Page     | 1        |
| Doc<br>Number       | USB1135                            | Prepared     | СС           | Checked | ۸٦ | Approved | PH       |





| Part<br>Number      | USB1135                            |              | Rev          |         | Α  | Date     | 26/06/20 |
|---------------------|------------------------------------|--------------|--------------|---------|----|----------|----------|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Througl | h Hole, Hori | zontal  |    | Page     | 2        |
| Doc<br>Number       | USB1135                            | Prepared     | СС           | Checked | ۸٦ | Approved | PH       |

### 1.0 SCOPE.

This specification covers performance, tests and quality requirements for the USB Receptacle USB1135 (Type A, Through Hole, Horizontal, Top Mount,).

### 2.0 PRODUCT NAME AND PART NUMBER.

USB 3.0 Receptacle, Type A, Through Hole, Horizontal, Top Mount, USB1135.

### 3.0 PRODUCT SHAPE, DIMENSIONS AND MATERIAL.

Please refer to drawings.

### 4.0 RATINGS.

3.0A (Power and GND Pins 1,4,7)

4.3 Operating Temperature Range ..... -55°C to +85°C

### 5.0 TEST AND MEASUREMENT CONDITIONS.

Product is designed to meet electrical, mechanical and environmental performance requirements specified in Paragraph 6.0. All tests are performed in ambient conditions unless otherwise specified.

### 6.0 PERFORMANCE.

| Item                | Test Condition   | Requirement   |
|---------------------|--|---|
| Examination of Prod | Visual, dimensional and functional inspection as per quality plan. | Product shall meet requirements of product drawing and specification. |



| Part<br>Number      | USB1135                            |              | Rev          |         | Α  | Date     | 26/06/20 |
|---------------------|------------------------------------|--------------|--------------|---------|----|----------|----------|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Througl | h Hole, Hori | zontal  |    | Page     | 3        |
| Doc<br>Number       | USB1135                            | Prepared     | СС           | Checked | ۸٦ | Approved | PH       |

## 6.1 Electrical Performance.

| Item                                   | Test Condition   | Requirement  |
|--|--|--|
| Low-signal Level<br>Contact Resistance | Mate connectors, measure by dry circuit, 20mV Max., 100mA Max. In accordance with EIA-364-23.                            | Power Pins: 30mΩ Max.<br>Signal Pins: 50mΩ Max.                                      |
| Insulation Resistance                  | Unmated connectors, apply 100 V DC between adjacent terminals. In accordance with EIA-364-21.                            | 100 M Ω Min.   |
| Dielectric Withstanding<br>Voltage     | Test between adjacent contacts of unmated connectors. In accordance with EIA-364-20.                                     | 100 V AC Min. at sea level for<br>1 minute. No discharge,<br>flashover or breakdown. |
| Temperature Rise                       | Mate connector: measure the temperature rise when the maximum AC rated current is passed. In accordance with EIA-364-70. | 30°C max.  |

### 6.2 Mechanical Performance.

| Item                    | Test Condition   | Requirement  |
|-------------------------|--|--|
| Mating / Unmating Force | Mated and unmated at rate of 12.5mm cycles per minute. In accordance with EIA-364-13.  | Mating force: 35N Max.<br>Un-mating force: 10N Min.  |
| Durability              | Insertion and withdrawal are repeated with Plug for 20,000 cycles at the frequency of 500 Cycles (automatically) & 200 Cycles (manually) / hour max.  Mating force of 35N Max.&  Unmating force 8N Min. In accordance with EIA-364-09. | Appearance: No breakdown<br>Mating force: 35N max.<br>Un-mating force: 8N min. after test.<br>10 mΩ max. change allowed. |
| Vibration               | No discontinuities of 1µS or longer duration when mated USB connectors are subjected to 3.10 GRMS. 15 minutes in each of three mutually perpendicular planes.  In accordance with EIA-364-28 Test Condition VII, Test Letter D.        | No Damage<br>Discontinuity: 1 µsecond Max.   |



| Part<br>Number      | USB1135                            |              | Rev                              |         | А  | Date     | 26/06/20 |  |
|---------------------|------------------------------------|--------------|----------------------------------|---------|----|----------|----------|--|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Througl | A, Through Hole, Horizontal Page |         |    |          |          |  |
| Doc<br>Number       | USB1135                            | Prepared     | СС                               | Checked | ۸٦ | Approved | PH       |  |

## 6.3 Environmental Performance and Others.

| Item                                   | Test Condition   | Requirement  |
|--|--|--|
| Thermal Shock                          | Mate module and subject to follow condition for 10 cycles. At -55°C to +85°C. In accordance with EIA-364-32, test condition I.   | No Damage<br>10 mΩ max. change allowed.                            |
| Mechanical Shock                       | Mated USB connectors are subjected to 11ms duration 30Gs half-sine shock pules. Three shocks in each direction applied along three mutually perpendicular planes for 18 shocks.  In accordance with EIA-364-27, test condition H.  | No Damage<br>Discontinuity: 1.0 μsecond max.                       |
| Humidity & Temperature<br>Cycling Test | Mate Connector and expose to temperature of 25~65°C±3, 50~80%RH±3, Ramp times should be 0.5 hour & dwell should be 1 hour, 1 cycle 24H. Dwell times start when the temperature is stabilized within the specified levels. In accordance with EIA-364-31, Test condition A. | No Damage<br>10 mΩ max. change allowed.                            |
| Temperature Life                       | Subject mated connectors to temperature life at 105°C for 120 hours. Measure Signal. In accordance with EIA-364-17, Test condition A.  | No Damage<br>10 mΩ max. change allowed.                            |
| Solderability                          | Dip solder-tails in flux then immerse in solder bath at 255±5 °C up to 0.5mm from the bottom of the housing for 5 seconds. In accordance with EIA-364-52, Category 2.  | 95% of immersed area must show no voids, pin holes.                |
| Salt Spray                             | Subject mated/unmated connectors to 5% salt-solution concentration, 35°C for 24 hours. In accordance with EIA-364-26, Test Condition B.  | No visible rust on contact area 10 m $\Omega$ max. change allowed. |



| Part<br>Number      | USB1135                            |             | Rev          |         | А  | Date     | 26/06/20 |
|---------------------|------------------------------------|-------------|--------------|---------|----|----------|----------|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Throug | h Hole, Hori | zontal  |    | Page     | 5        |
| Doc<br>Number       | USB1135                            | Prepared    | СС           | Checked | ۸٦ | Approved | PH       |

| Item  | Test Condition  | Requirement  |
|---|---|--|
| Resistance to Solder<br>Heat (Wave Soldering) | Heat: 260±5°C ,10+2/-0 sec.<br>(on solder tails only)<br>In accordance with EIA-364-56  | Sample mounted on PCB and subject to wave soldering. Without deformation of case or excessive looseness of the terminals/pin (DIP only). |
| Resistance to Solder<br>Heat (Hand Soldering) | Solder iron method solder temperature: 350±10°C (on solder tails only) Immersion time: 3±1 seconds, however excessive pressure shall not be applied to the terminal | Without deformation of case or excessive looseness of the terminals/pin.   |



| Part<br>Number      | USB1135                            |              | Rev                              |         | А  | Date     | 26/06/20 |  |
|---------------------|------------------------------------|--------------|----------------------------------|---------|----|----------|----------|--|
| Product Description | USB 3.0 Receptacle, Type Top Mount | e A, Througl | A, Through Hole, Horizontal Page |         |    |          |          |  |
| Doc<br>Number       | USB1135                            | Prepared     | СС                               | Checked | ۸٦ | Approved | PH       |  |

## 7.0 PRODUCT QUALIFICATION AND TEST SEQUENCE

| Test Item                         | Test Group |     |     |      |     |      |      |     |  |
|-----------------------------------|------------|-----|-----|------|-----|------|------|-----|--|
| rest item                         | 1          | 2   | 3   | 4    | 5   | 6    | 7    | 8   |  |
| Examination of Product            | 1, 3       | 1,8 | 1,5 | 1, 9 | 1,3 | 1, 3 | 1, 3 | 1,3 |  |
| Low-signal Contact Resistance     |            |     | 2,4 | 3, 7 |     |      |      |     |  |
| Insulation Resistance             |            | 2,6 |     |      |     |      |      |     |  |
| Dielectric Withstanding Voltage   |            | 3,7 |     |      |     |      |      |     |  |
| Temperature Rise                  | 2          |     |     |      |     |      |      |     |  |
| Mating / Unmating Force           |            |     |     | 2,8  |     |      |      |     |  |
| Durability                        |            |     |     | 4    |     |      |      |     |  |
| Vibration                         |            |     |     | 6    |     |      |      |     |  |
| Thermal Shock                     |            | 4   |     |      |     |      |      |     |  |
| Mechanical Shock                  |            |     |     | 5    |     |      |      |     |  |
| Humidity & Temperature Cycling    |            | 5   |     |      |     |      |      |     |  |
| Temperature Life                  |            |     | 3   |      |     |      |      |     |  |
| Salt Spray                        |            |     |     |      | 2   |      |      |     |  |
| Solderability                     |            |     |     |      |     | 2    |      |     |  |
| Resistance to Wave Soldering Heat |            |     |     |      |     |      | 2    |     |  |
| Resistance to Hand Soldering Heat |            |     |     |      |     |      |      | 2   |  |
| 0                                 |            | Ι   |     |      | 1   |      |      |     |  |
| Sample Size                       | 5          | 5   | 5   | 5    |     | 5    | 5    | 5   |  |



| Part<br>Number      | USB1135  |          | Rev |         | А  | Date     | 26/06/20 |
|---------------------|--|----------|-----|---------|----|----------|----------|
| Product Description | USB 3.0 Receptacle, Type A, Through Hole, Horizontal Top Mount |          |     |         |    |          | 7        |
| Doc<br>Number       | USB1135  | Prepared | СС  | Checked | ۸٦ | Approved | PH       |

### Revision details

| Revision | Information            | Page | Release Date |  |
|----------|------------------------|------|--------------|--|
| Α        | Specification Released | -    | 26/06/2020   |  |
|          |                        |      |              |  |
|          |                        |      |              |  |



## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Global Connector Technology (GCT): USB1135-15-9-L-B