### **LUSB Connector Series**

Type A, Right Angle with Positive Latch Product Specification S6044C Rev 0.5

# Now you're connected!

#### About Amphenol Commercial Products

Amphenol's commercial connector products are used in a variety of end user applications including networking, telecom, server & computer, storage & HDD, consumer electronics and entertainment, professional audio & Industrial & Military/Aerospace.



MUSB



MUSB-B151-34 SERIES MINI-B, RIGHT ANGLE SHOWN

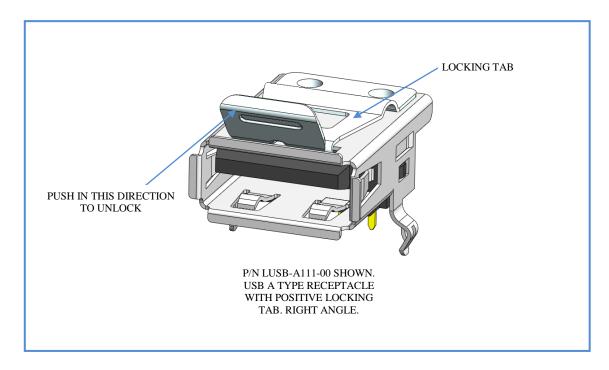


MUSB-C111-30 SERIES A, RIGHT ANGLE,

MRJ



MRJ-5380-01 SHOWN RIGHT ANGLE, PCB TAIL, 8 POSITION RJ45



#### Overview

This Product Specification defines the general use and performance parameters for Amphenol's LUSB, USB with positive locking series of connectors.

Availability: USB 2.0 series type A, right angle PCB mount. USB 3.0 series type A, right angle PCB mount available now. USB 2.0 series type A, vertical planned for future release.

#### Usage

The connector system is designed to provide a standard USB interface with a unique latching mechanism to prevent the unintentional interruption of data transmission. The latch must be intentionally raised in order to remove the plug. An accidental pull on the cable up to 50N (11.2lbs) force will not separate the connectors.

#### **Applications**

Intended for use in applications such as:

- Medical equipment
- ATM machines
- Lottery Terminals
- GPS
- Miltary Vehicles, radios, PDA
- Hand Held Data Loggers
- Mobile Entertainment Systems

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#### **Related Products**

#### MUSB



MUSB-B151-34 SERIES MINI-B, RIGHT ANGLE SHOWN



MUSB-C111-30 SERIES A, RIGHT ANGLE, STACKED SHOWN

#### MRJ



MRJ-5380-01 SHOWN RIGHT ANGLE, PCB TAIL, 8 POSITION RJ45

#### **Connector Electrical Characteristics**

Maximum current: 1.5A per contact for USB 2.0

1.8A for positions 1 &4 with 0.25A on remaining positions on the USB 3.0

Contact resistance:  $30 \text{ m}\Omega$  max Insulation Resistance:  $1000 \text{ M}\Omega$  min DWV: 500 VAC @ sea level

#### **Connector Mechanical Characteristics**

Standard USB interface

Thermal Shock: 10 cycles -65°C to +105° C

Physical Shock: Per EIA-364-27 Condition H (11ms 30G) Humidity: Per EIA-364-31B, Method III, Condition B Vibration: Per EIA-364-28D per Condition V, Test A

Durability: 1500 mating cycles Insertion Force: 35 N (7.87 lbs) max

Withdrawal Force: 8 N (1.8 lbs) min with latch disengaged

#### **Material Requirements**

LUSB connectors are RoHS compliant.
Unless otherwise specified, the materials for each component shall be:

#### Connector

- Contacts
  - o Base material: Copper alloy
  - O Plating: 30 μ" (0.76 μm) min Gold over Nickel
- Housing: High temperature thermoplastic, UL94V-0 rated, Black
- Shell
  - o Base material: Copper alloy
  - o Plating: Nickel
- Locking Tab: Stainless Steel

Temperature rise: Meets the requirement of  $30^{\circ}$  C  $\Delta T$  Operating temperature - $40^{\circ}$  to + $85^{\circ}$  C

#### **Available Documents**

#### **Drawing Numbers:**

P-LUSB-A111-00 LUSB Series A Right Angle Receptacle with Positive Locking Tab
P-LUSB-3193-00 LUSB Series USB 3.0 Type A Receptacle with Positive Locking Latch
LUSB Series A Vertical Receptacle with Locking Letch

P-LUSB-A511-00 LUSB Series A Vertical Receptacle with Locking Latch

OTR:

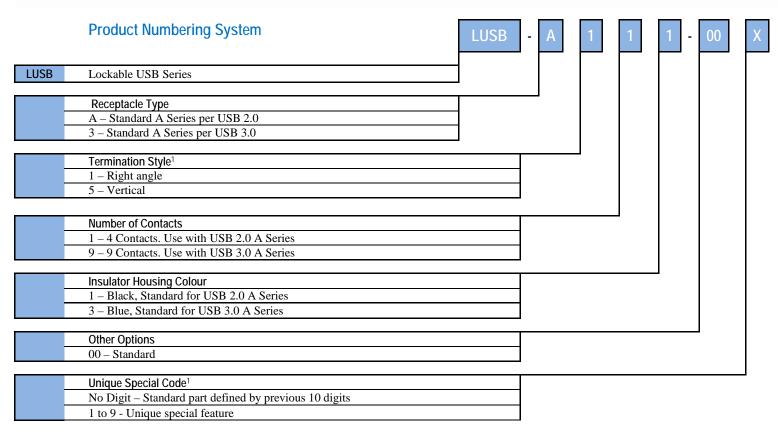
QTR9300426 Qualification Test Report

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#### Notes:

Consult with Amphenol for additional connectors such as vertical or upright (flag) termination styles, contact tail lengths, latch styles or other special requirements

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