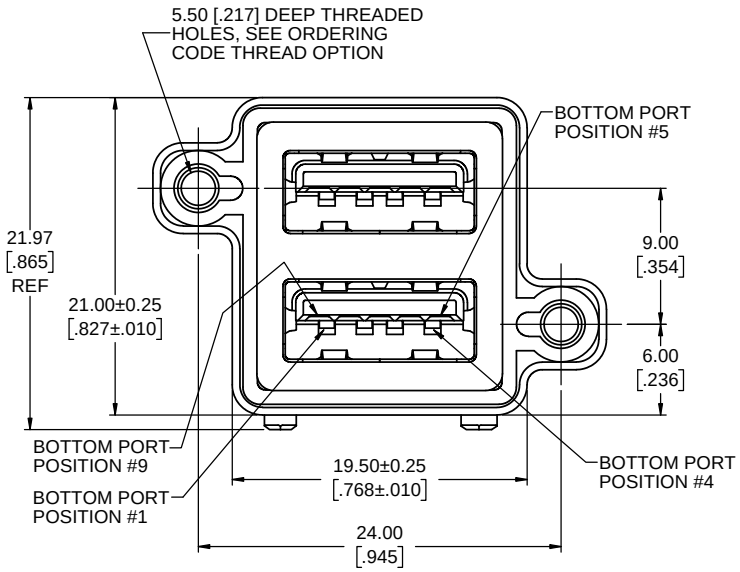
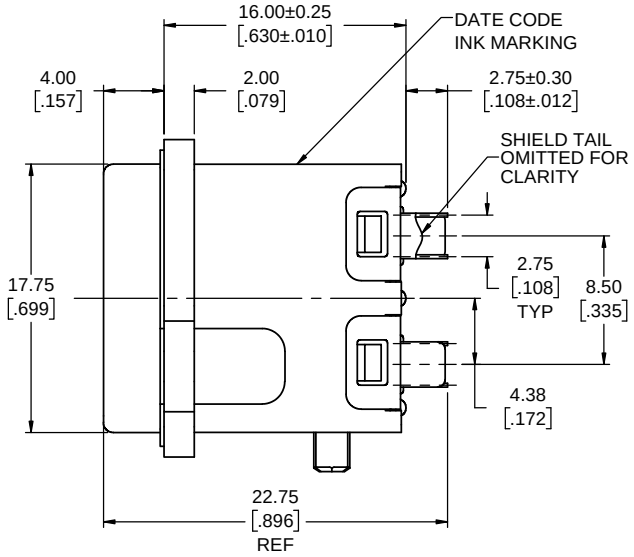
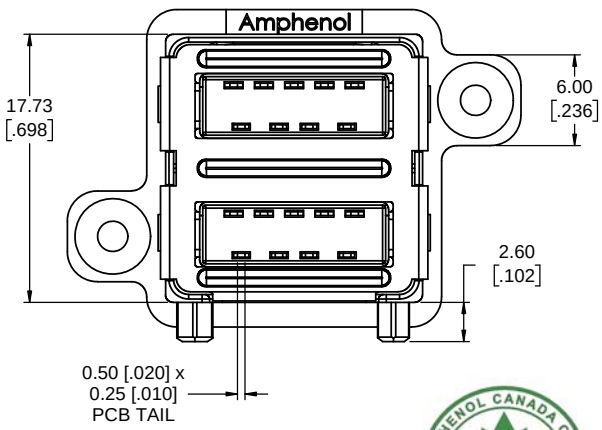
| REVISIONS | | | |
|---|---|---|---|
| REV | DESCRIPTION, ECN, EAR NO. | DATE | APP'D |
| A | PROPOSAL DRAWING (EAR 14408) | MAY24/16 | K.L. |
| B | PROPOSAL DRAWING (EAR 14408) | JAN11/17 | K.L. |
| C | PROPOSAL DRAWING (EAR 14408) | FEB28/17 | K.L. |




**ORDERING CODE:** M U S B R - 4 5 9 3 - X X

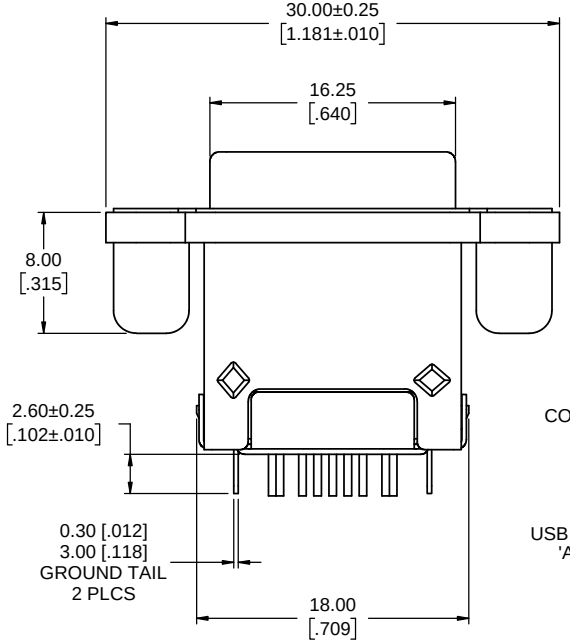
SERIES, RUGGED USB

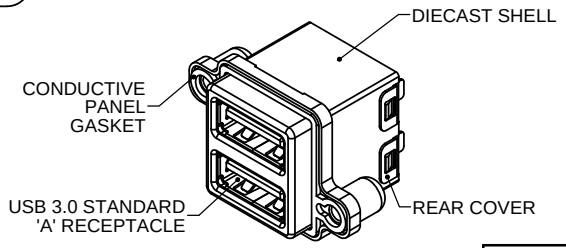
USB 3.0 STANDARD 'A' RECEPTACLE, STACKED, VERTICAL PCB TAIL

THREAD OPTION
3 = #4-40 UNC THREAD
M = M3 x 0.5 THREAD

DUST COVER OPTION
0 = NO DUST COVERS SUPPLIED
1 = WITH GREY DUST COVERS SUPPLIED
5 = WITH BLACK DUST COVERS SUPPLIED

**SPECIAL CONNECTORS:**
MANY UNIQUE FEATURES ARE READILY AVAILABLE TO SUIT CUSTOMER REQUIREMENTS. CONSULT WITH AMPHENOL CANADA FOR DETAILS.




**NOTES:**

1. MATERIAL:
   - ALL MATERIALS ARE RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU AND AMENDMENTS
   - OUTER SHELL - DIECAST ZINC ALLOY, MATTE TIN OVER NICKEL PLATED
   - CONTACTS - PHOSPHOR BRONZE & COPPER ALLOY, PLATED WITH 0.76 µm (30 µ") GOLD OVER 1.27 µm (50 µ") MINIMUM NICKEL ON THE MATING AREA WITH MATTE TIN PLATING ON THE TAILS.
   - HOUSINGS - ENGINEERING THERMOPLASTIC, HIGH TEMPERATURE RESISTANT, FLAMMABILITY RATING UL94V-0, MATING AREA - BLUE, OTHERS - BLACK
   - USB SHIELD & REAR COVER - STAINLESS STEEL, PASSIVATED
   - PANEL GASKET - CONDUCTIVE SILICONE RUBBER, BLACK
   - DUST COVER - SILICONE RUBBER WITH NICKEL PLATED BRASS BUSHING. SEE ORDERING CODE FOR DUST COVER COLOUR OPTIONS. SEE SHEET 2 FOR DUST COVER VIEWS.
2. ENVIRONMENTAL PERFORMANCE PER IEC 60529 CODE IP67 FOR SEAL BETWEEN MATING AREA AND PCB SIDE OF CONNECTOR. GASKET PROVIDES SEAL TO INSIDE FACE OF ENCLOSURE PANEL. AVAILABLE DUST COVERS PROVIDE ADDED PROTECTION.
3. CURRENT RATING: 1.8A MAX. FOR POSITIONS 1 & 4, 0.25A MAX. FOR REMAINING POSITIONS
4. CONTACT RESISTANCE: 30 MILLIOHMS MAX. FOR POSITIONS 1 & 4, 50 MILLIOHMS FOR REMAINING POSITIONS.
5. OPERATING TEMPERATURE: -40°C TO +105°C.
6. DUST COVERS MAY BE ORDERED SEPARATELY. SPECIFY
   - PART NUMBER MUSB-2A111-014BP FOR THE GREY COVER OR
   - PART NUMBER MUSB-2A111-024BP FOR THE BLACK COVER.

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED FOR MANUFACTURING PURPOSES WITHOUT WRITTEN PERMISSION FROM AMPHENOL CANADA CORP.

| | | | |
|---|---|---|---|
| UNLESS SPECIFIED OTHERWISE | DRAWN | B.COPPING | MAY24/16 |
| PRIMARY UNITS MILLIMETERS | CHECKED | K.LAMBIE | MAY24/16 |
| SECONDARY INCHES | M.E. APP'D | | |
| REFERENCE IN PARENTHESES | Q.A. APP'D | | |
| GENERAL TOLERANCES | DWG APPR. | | |
| 1 DECIMAL PLACE | ENG. REL. NO. | EAR 14408 | |
| 2 DECIMAL PLACES ±0.15 | REF. | | |
| 3 DECIMAL PLACES | THIRD ANGLE PROJECTION | | DO NOT SCALE DRAWING |
| ANGULAR DEGREES | | | |

**Amphenol Canada Corp.**
www.amphenolcanada.com

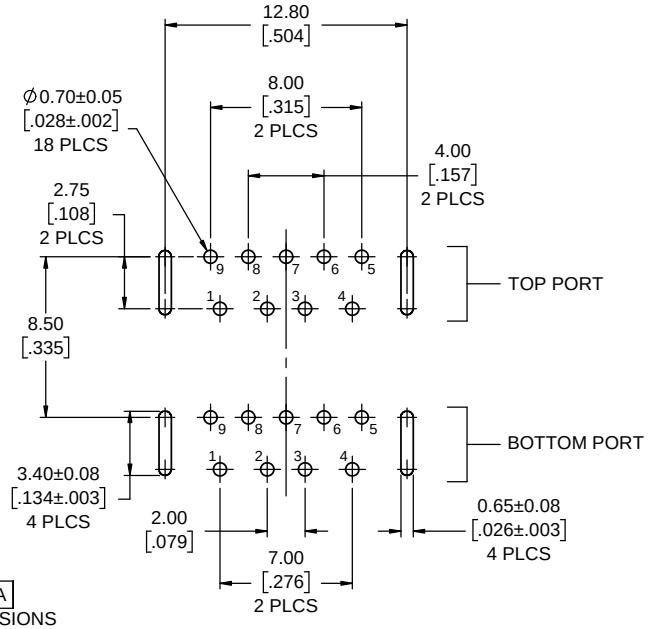
MUSBR RUGGED USB CONNECTOR, 3.0 STANDARD 'A' RECEPTACLE, STACKED, VERTICAL PCB TAIL, THREAD & DUST COVER OPTIONS, RoHS COMPLIANT

DWG. NO. P-MUSBR-4593-XX REV C

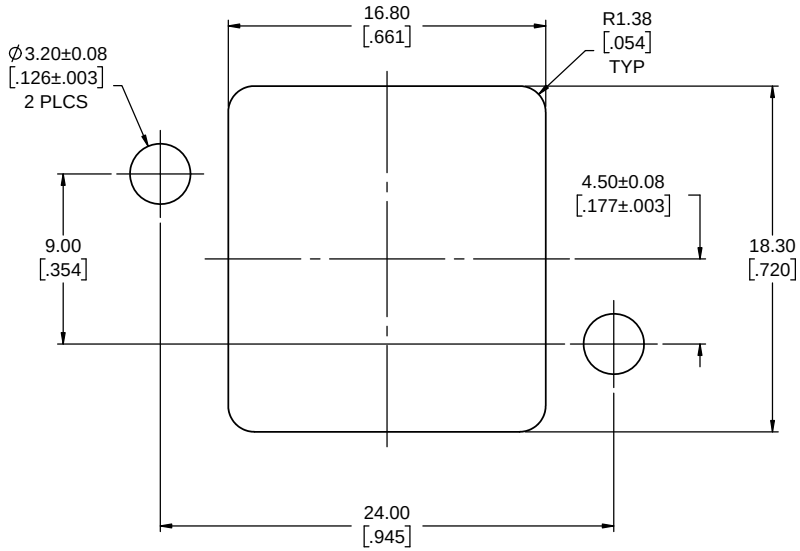
CODE ID NO. 03554 | DWG SIZE: X | SCALE: 4:1 | SHEET 1 OF 2

| PIN ASSIGNMENT CHART | | |
|---|---|---|
| POSITION # | SIGNAL NAME | DESCRIPTION |
| 1 | VBUS | POWER |
| 2 | D- | USB 2.0 DIFFERENTIAL PAIR |
| 3 | D+ | |
| 4 | GND | GROUND FOR POWER RETURN |
| 5 | STDA_SSRX- | SS RECEIVER DIFFERENTIAL PAIR |
| 6 | STDA_SSRX+ | |
| 7 | GND_DRAIN | GROUND FOR SIGNAL RETURN |
| 8 | STDA_SSTX- | SS TRANSMITTER DIFFERENTIAL PAIR |
| 9 | STDA_SSTX+ | |
| SHELL | SHIELD | CONNECTOR METAL SHELL |

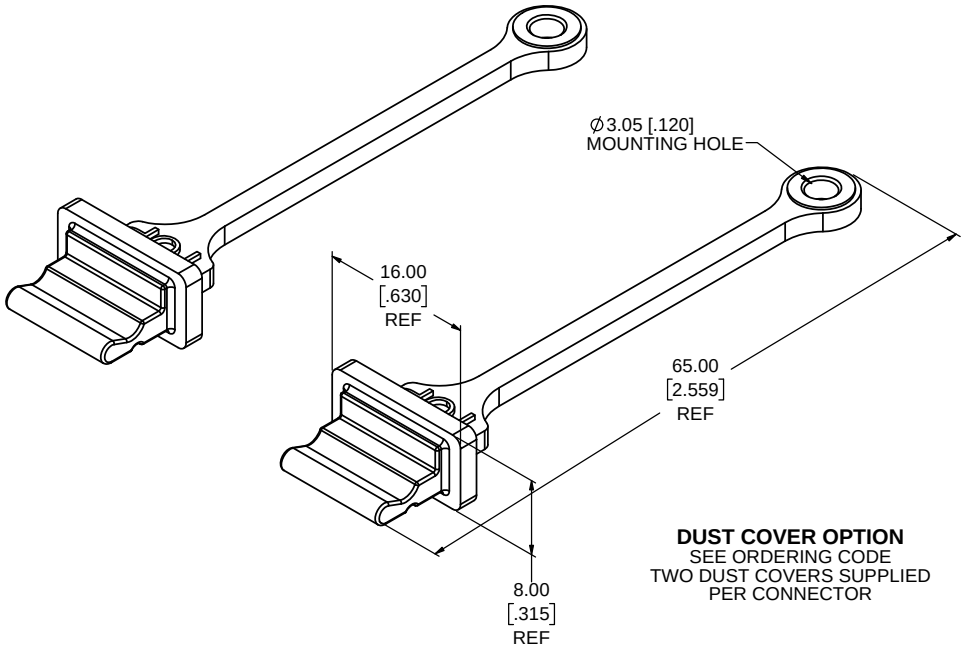
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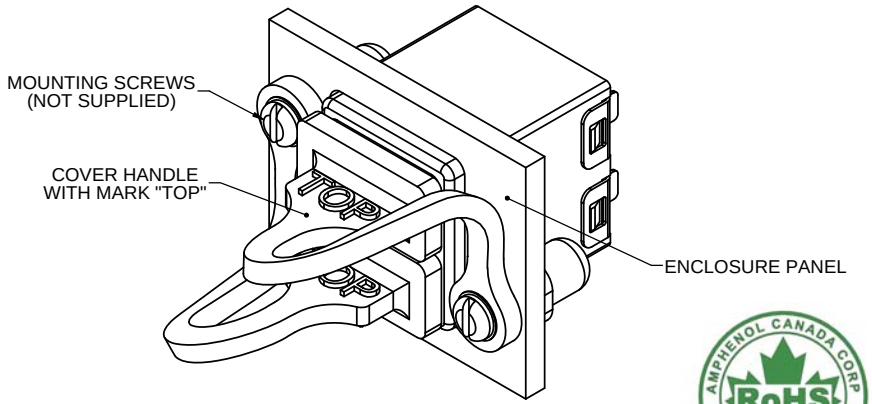

**RECOMMENDED PCB LAYOUT**
COMPONENT SIDE OF BOARD




**RECOMMENDED PANEL CUTOUT**
OUTSIDE VIEW OF PANEL




**DUST COVER OPTION**
SEE ORDERING CODE
TWO DUST COVERS SUPPLIED
PER CONNECTOR




**DUST COVER APPLICATION VIEW**

AMPHENOL CANADA CORP RoHS COMPLIANT 2011/65/EU RECAST

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| UNLESS SPECIFIED OTHERWISE | DRAWN | B.COPPING | MAY24/16 |
| PRIMARY UNITS MILLIMETERS | CHECKED | K.LAMBIE | MAY24/16 |
| SECONDARY INCHES | M.E. APP'D | | |
| REFERENCE IN PARENTHESES | Q.A. APP'D | | |
| GENERAL TOLERANCES | DWG APPR. | | |
| 1 DECIMAL PLACE | ENG. REL. NO. | EAR 14408 | |
| 2 DECIMAL PLACES ±0.15 | REF. | | |
| 3 DECIMAL PLACES | THIRD ANGLE PROJECTION | DO NOT SCALE DRAWING | |
| ANGULAR DEGREES | | | |

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www.amphenolcanada.com

MUSBR RUGGED USB CONNECTOR, 3.0 STANDARD 'A' RECEPTACLE, STACKED, VERTICAL PCB TAIL, THREAD & DUST COVER OPTIONS, RoHS COMPLIANT

DWG. NO. P-MUSBR-4593-XX REV C

CODE ID NO. 03554 | DWG SIZE: X | SCALE: 5:1 | SHEET 2 OF 2