



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

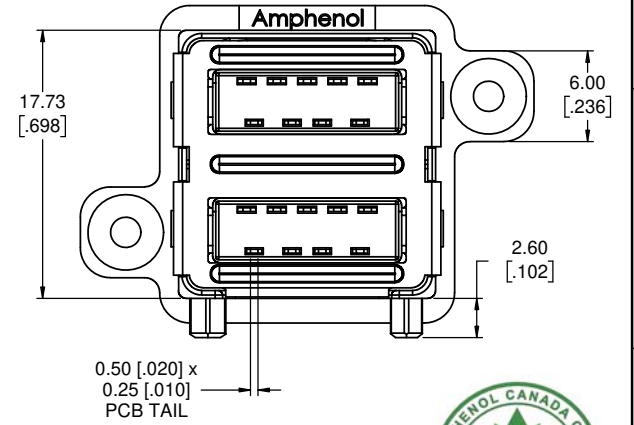
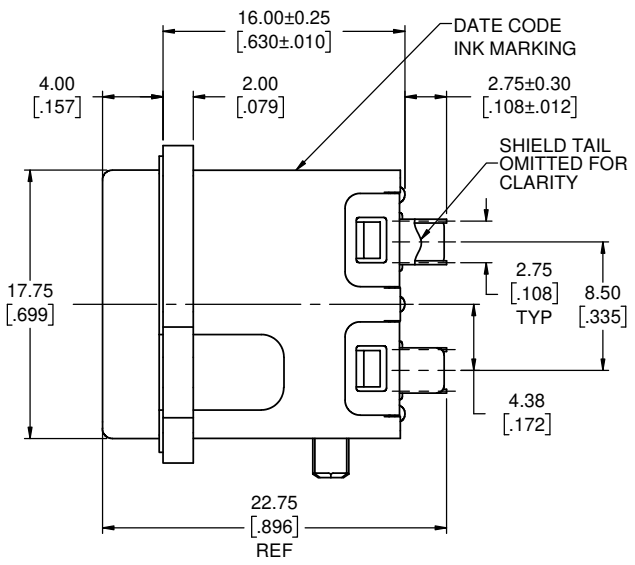
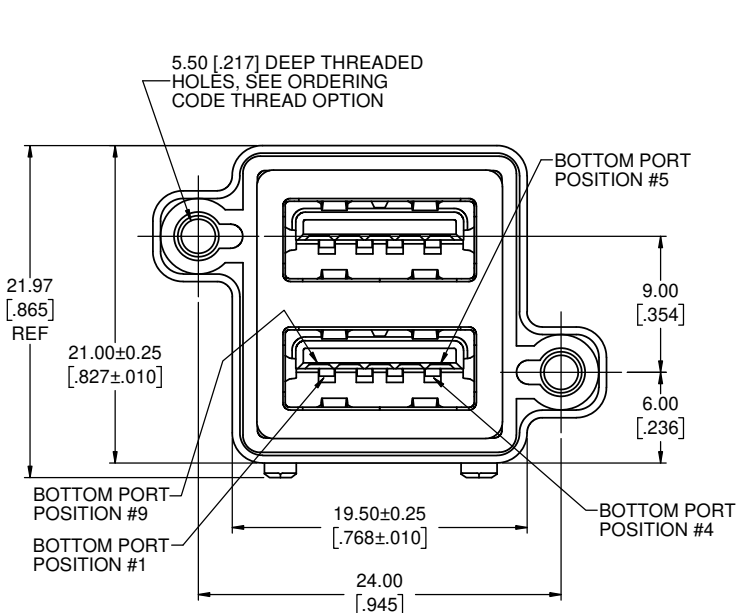
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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.	



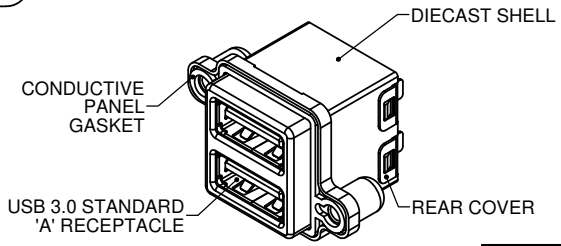
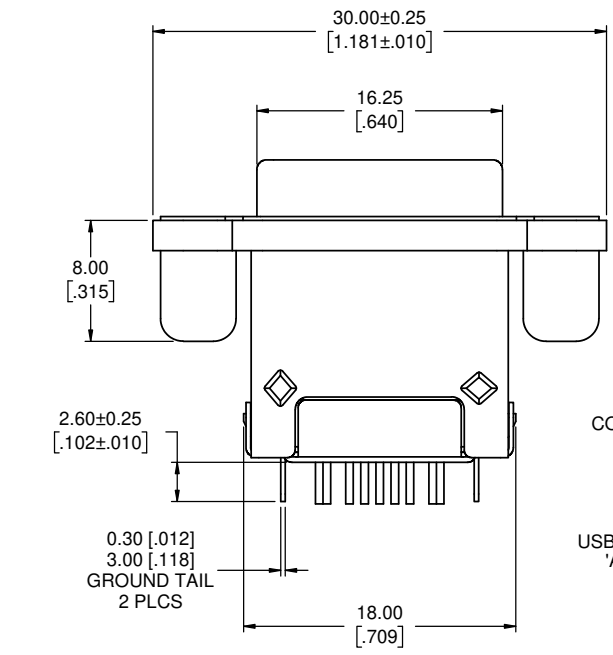
**ORDERING CODE: M U S B R - 4 5 9 3 - X X**

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:**

- 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.
- 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.
- CURRENT RATING: 1.8A MAX. FOR POSITIONS 1 & 4, 0.25A MAX. FOR REMAINING POSITIONS
- CONTACT RESISTANCE: 30 MILLIOHMS MAX. FOR POSITIONS 1 & 4, 50 MILLIOHMS FOR REMAINING POSITIONS.
- OPERATING TEMPERATURE: -40°C TO +105°C.
- 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.



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		
ANGULAR DEGREES	DO NOT SCALE DRAWING		

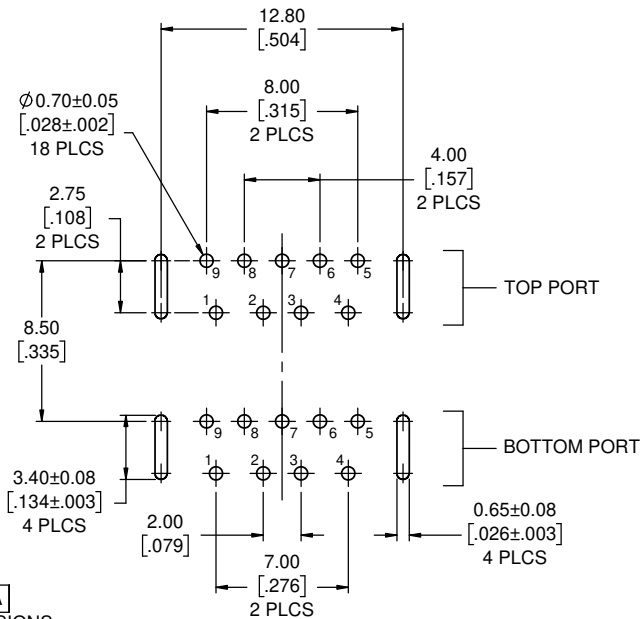
**Amphenol Canada Corp.**  
 www.amphenolcanada.com  
**MUSBR RUGGED USB CONNECTOR, 3.0 STANDARD 'A' RECEPTACLE, STACKED, VERTICAL PCB TAIL, THREAD & DUST COVER OPTIONS, RoHS COMPLIANT**

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

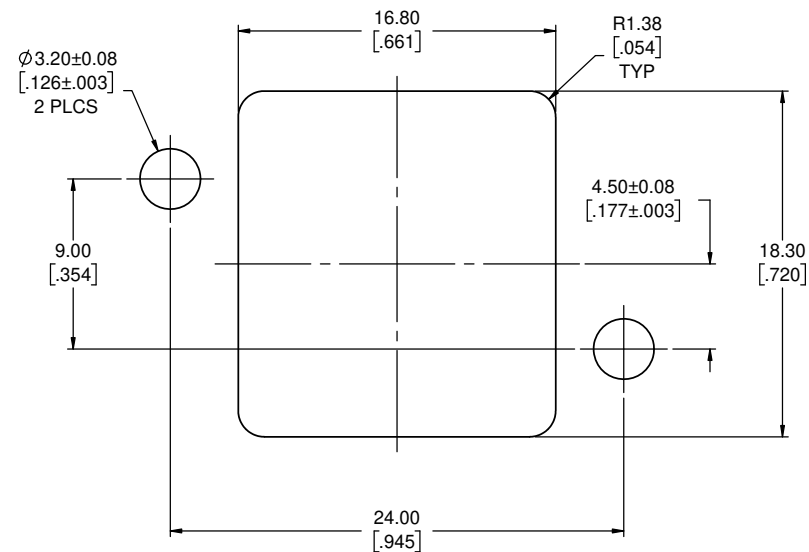
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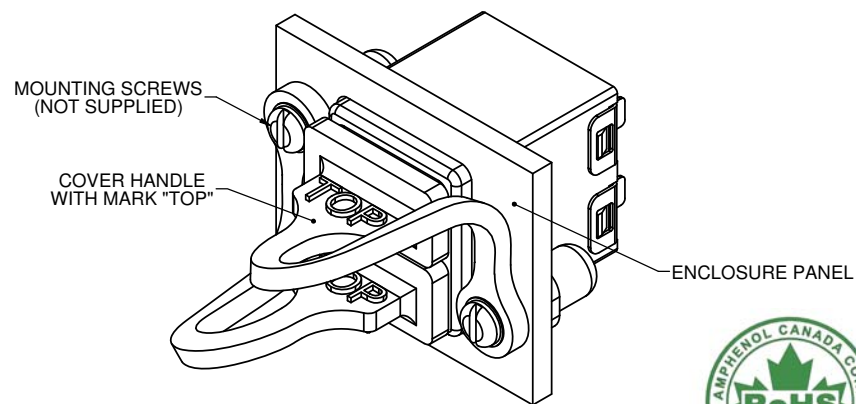
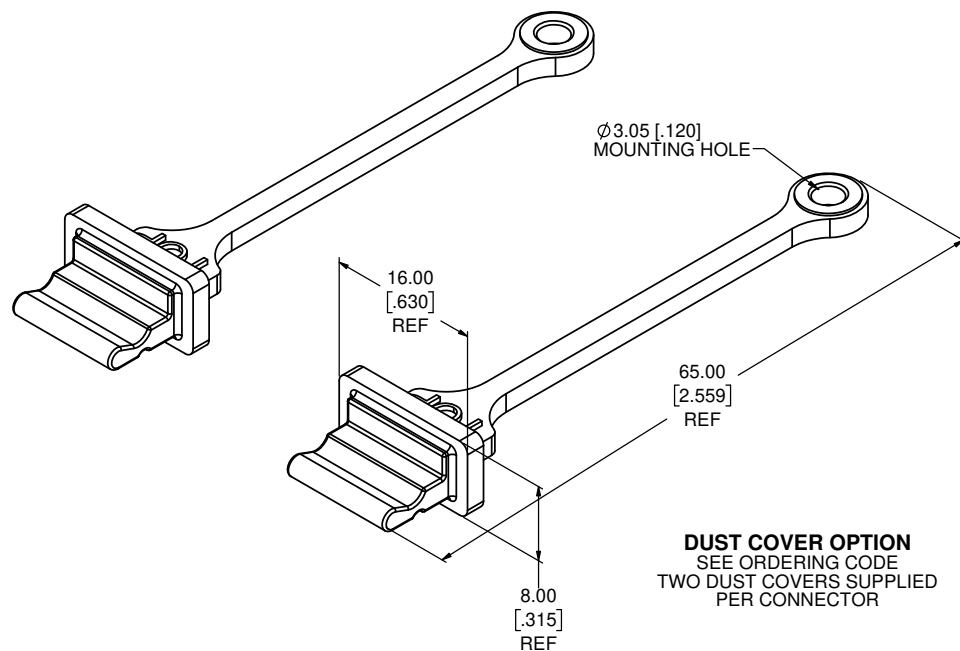
PIN ASSIGNMENT CHART		
POSITION #	SIGNAL NAME	DESCRIPTION
1	VBUS	POWER
2	D-	USB 2.0 DIFFERENTIAL PAIR
3	D+	
4	GND	GROUND FOR POWER RETURN
5	STDA_SSRX-	SS RECEIVER DIFFERENTIAL PAIR
6	STDA_SSRX+	
7	GND_DRAIN	GROUND FOR SIGNAL RETURN
8	STDA_SSTX-	SS TRANSMITTER DIFFERENTIAL PAIR
9	STDA_SSTX+	
SHELL	SHIELD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



**RECOMMENDED PCB LAYOUT**  
COMPONENT SIDE OF BOARD



**RECOMMENDED PANEL CUTOUT**  
OUTSIDE VIEW OF PANEL



**DUST COVER APPLICATION VIEW**



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ANGULAR DEGREES	DO NOT SCALE DRAWING		

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www.amphenolcanada.com

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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