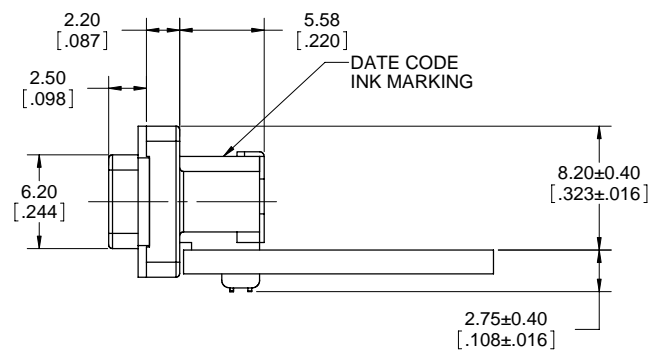
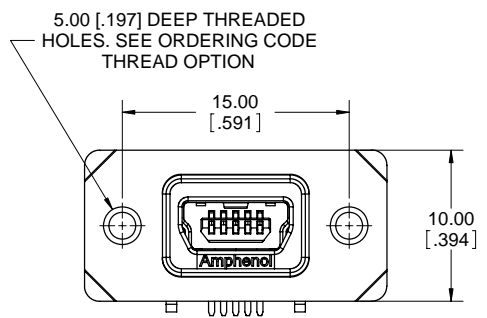
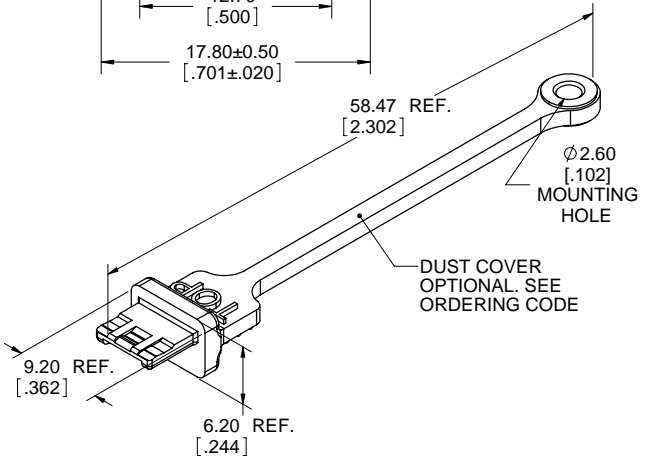
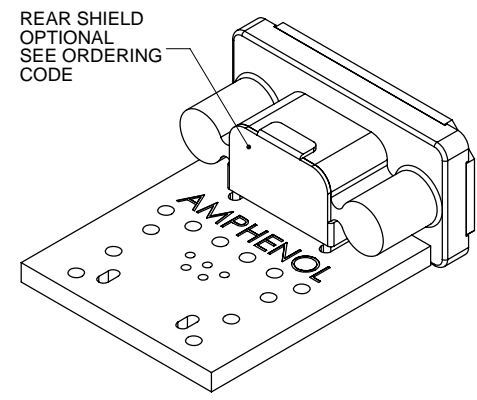
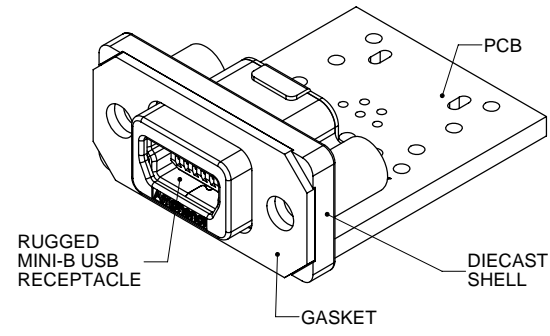
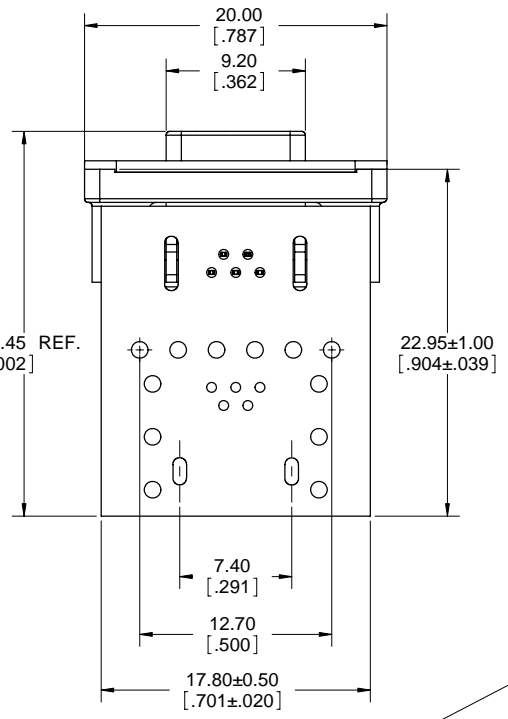


REVISIONS			
REV.	DESCRIPTION, ECN, EAR NO.	DATE	APPROVED
B	PRODUCT DRAWING (EAR 13491)	JUN01/10	K.L.



ORDERING CODE: M U S B - B A 5 1 - X X

SERIES, RUGGED USB  
 MINI-B RECEPTACLE, RIGHT ANGLE, ON PCB WITH HOLES FOR WIRING  
 REAR SHIELD & THREAD OPTION  
 0=NO REAR SHIELD, #2-56 UNC THREAD  
 3=WITH REAR SHIELD, #2-56 UNC THREAD  
 M=WITH REAR SHIELD, M2.5 x 0.45 THREAD  
 N=NO REAR SHIELD, M2.5 x 0.45 THREAD  
 DUST COVER OPTION  
 0=NO DUST COVER SUPPLIED  
 1=WITH GREY DUST COVER SUPPLIED  
 5=WITH BLACK DUST COVER SUPPLIED



NOTES:

- MATERIAL  
 ALL MATERIALS ARE RoHS COMPLIANT PER EU DIRECTIVE 2002/95/EC AND AMENDMENTS.
  - OUTER SHELL - DIECAST ZINC, NICKEL PLATED
  - CONTACTS - PHOSPHOR BRONZE WITH 30 MICRONS (0.76 MICRONS) GOLD OVER 50 MICRONS (1.27 MICRONS) MINIMUM NICKEL ON THE MATING AREA AND TIN OVER NICKEL ON THE CONTACT TAILS
  - USB HOUSING: ENGINEERING THERMOPLASTIC, UL FLAMMABILITY RATING UL94V-0, BLACK
  - USB SHIELD: COPPER ALLOY, NICKEL PLATED
  - REAR SHIELD: COPPER ALLOY, NICKEL PLATED
  - GASKET - PORON, WITH ADHESIVE BACKING
  - PCB - FR-4 FIBERGLASS, LEAD FREE
  - DUST COVER: SILICONE RUBBER WITH NICKEL PLATED COPPER ALLOY BUSHING
- 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 COVER PROVIDES ADDED PROTECTION.
- CURRENT RATING: 1 AMPERES.
- CONTACT RESISTANCE: 100 MILLIOHMS (SUBJECT TO VERIFICATION).
- OPERATING TEMPERATURE: -40 °C TO +105 °C.
- DUST COVERS MAY BE ORDERED SEPARATELY. SPECIFY
  - MUSB-2E151-005BP FOR GREY DUST COVER
  - MUSB-2E151-015BP FOR BLACK DUST COVER
 SEE PAGE 2 FOR APPLICATION VIEW

UNLESS SPECIFIED OTHERWISE	DRAWN	H.KIM	MAR13/09
PRIMARY UNITS	MILLIMETERS	CHECKED	
SECONDARY	INCHES	M.E. APP'D	
REFERENCE IN PARENTHESES		Q.A. APP'D	
GENERAL TOLERANCES	DWG APPR.	K.LAMBIE	MAR18/09
1 DECIMAL PLACE	ENG. REL. NO.		
2 DECIMAL PLACES ±0.15	REF.	EAR 13491	DWG. NO.
3 DECIMAL PLACES	THIRD ANGLE PROJECTION		
ANGULAR DEGREES		DO NOT SCALE DRAWING	

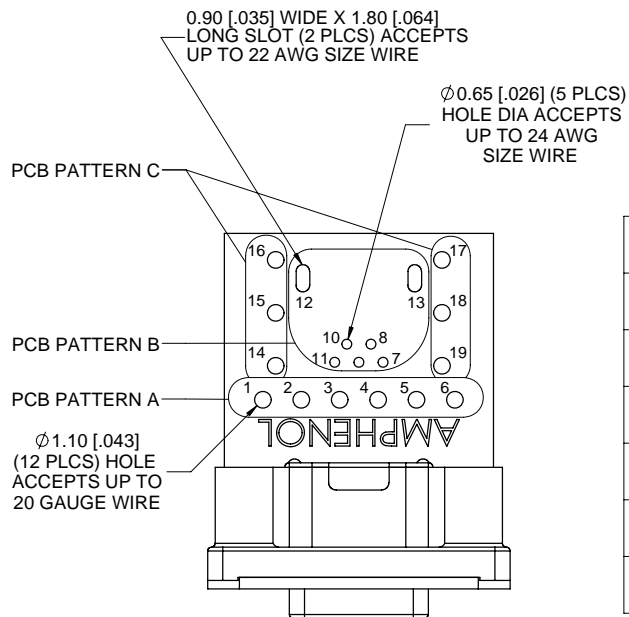
**Amphenol Canada Corp.**

MUSB SERIES RUGGED MINI-B USB RECEPTACLE, RIGHT ANGLE, ON PCB WITH HOLES FOR WIRING, RoHS COMPLIANT

P-MUSB-BA51-XX

REV B

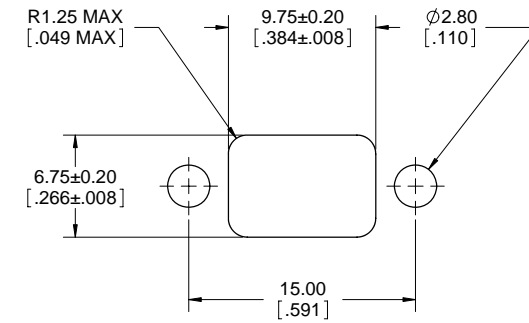
REVISIONS			
REV.	DESCRIPTION, ECN, EAR NO.	DATE	APPROVED
B	PRODUCT DRAWING (EAR 13491)	JUN01/10	K.L.



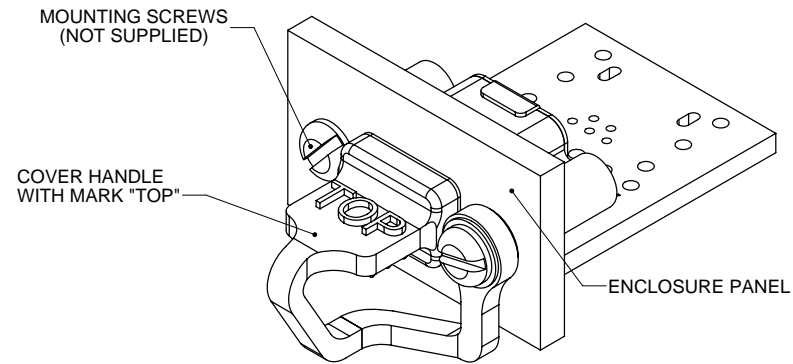
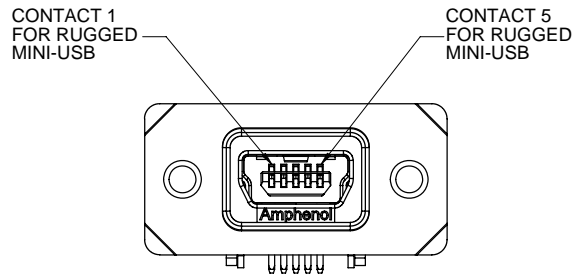
### MINI USB TO PCB CONNECTION CHART

MINI-B USB RECEPTACLE	PCB HOLE PATTERN A	PCB HOLE PATTERN B	PCB HOLE PATTERN C
SHELL/GROUND	HOLE 6	HOLE 12 OR 13	HOLE 19
CONTACT 1	HOLE 1	HOLE 7	HOLE 14
CONTACT 2	HOLE 2	HOLE 8	HOLE 15
CONTACT 3	HOLE 3	HOLE 9	HOLE 16
CONTACT 4	HOLE 4	HOLE 10	HOLE 17
CONTACT 5	HOLE 5	HOLE 11	HOLE 18

WIRES MAY BE CONNECTED TO HOLE PATTERN A, B OR C OR A COMBINATION OF THE THREE PATTERNS.



### RECOMMENDED PANEL CUTOUT



### DUST COVER APPLICATION



UNLESS SPECIFIED OTHERWISE	DRAWN	H.KIM	MAR13/09
PRIMARY UNITS	MILLIMETERS	CHECKED	
SECONDARY	INCHES	M.E. APP'D	
REFERENCE IN PARENTHESES		Q.A. APP'D	
GENERAL TOLERANCES	DWG APPR.	K.LAMBIE	MAR18/09
1 DECIMAL PLACE	ENG. REL. NO.		
2 DECIMAL PLACES ±0.15	REF.	EAR 13491	DWG. NO.
3 DECIMAL PLACES	THIRD ANGLE PROJECTION		
ANGULAR DEGREES	DO NOT SCALE DRAWING		

### Amphenol Canada Corp.

MUSB SERIES RUGGED MINI-B USB RECEPTACLE, RIGHT ANGLE, ON PCB WITH HOLES FOR WIRING, RoHS COMPLIANT

P-MUSB-BA51-XX

REV B