

Series 00-9159



AVX has developed the 1-Piece bottom entry card edge connector to allow a perpendicular PCB to be mated to a top mounted main FR4 or metal core PCB from the bottom side. The most popular application on the market is in the LED bulb market where the FR4 driver card needs to mate to the top pads on a metal core LED board. A unique design feature of the AVX connector is that it allows for both a 1.6mm and 0.8mm mating PCB thickness, giving designers flexibility in their PCB layout and selection. The additional "Anti-Touch" cap can be ordered pre-assembled onto the connector or separately. This component protects an individual for electrical contact if the lens comes off or the bulb is broken. This is a UL mandated safety requirement.

The connectors offer a range of 2 positions to 6 positions in order to add additional functionality in the application design such as color control or specific control lines. The connector is UL rated with halogen free material and capable of operating temperatures up to 120°C.

APPLICATIONS

- Provides perpendicular, bottom entry PCB mating to a top mounted card edge contact based connector
- Reference application notes 201-01-137
- Reference Product Specification 201-01-132UL

FEATURES AND BENEFITS

- Available 2p-6p for added design functionality and color control in bulb applications
- Low profile top mounted design does not interfere with LED's
- Gold plated BeCu contact system for high reliability in harsh environments
- Accepts both 0.8mm and 1.6mm PCB's for added design options

ELECTRICAL

- Current Rating: 2 Amps / Contact
- Voltage Rating: 250 VAC

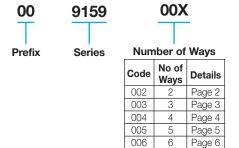
ENVIRONMENTAL

• Operating Temperature: -40°C to +120°C

MECHANICAL

- Insulator Material: Halogen Free Nylon UL94VO
- Contact Material: Beryllium Copper
- Plating: Gold / Tin over Nickel
- Durability 10 Cycles

HOW TO ORDER



6

Page 6

501				
Single Part PCB Strip Connector				
501 = Through				

502 = Through The Board,

Edge Card, Cap Fitted

501

Insulator Color			
Code	Color	Application	
9	White	UL Approved Standard	

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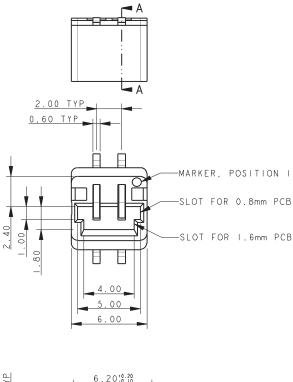
Certification: UL File #E90723

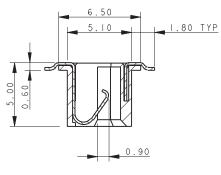




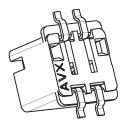
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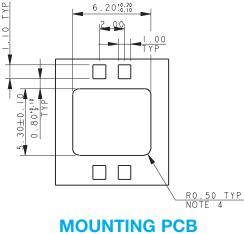






SECTION A-A





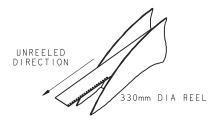
(TOP SIDE)

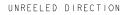
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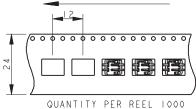
- 1. THROUGH THE BOARD 2 WAY EDGE CARD CONNECTOR, FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-136.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK. REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. UP TO 0.5MM RAD TO MATCH CONNECTOR PROFILE.
- 5. ALL DIMENSIONS ±0.20 UNLESS TOLERANCE SPECIFIED.
- 6. INSULATOR: PAR4T, GLASS FILLED, HALOGEN FREE, UL94 V-0, COLOR SEE PAGE 1.
- 7. CONTACT: COPPER ALLOW, NICKEL PLATED WITH GOLD FLASH ON NOSE AND TIN ON TAILS.
- 8. BRACKET: COPPER ALLOY, PLATING TIN OVER NICKEL.
- 9. PACKING IN TAPE AND REEL, 1000 PIECES PER REEL.
- 10. CONTACT TAILS COPLINARITY WITHIN 0.10.
- 11. REFER TO PAGE 10 FOR MATCHING PROTECTING CAP.
- 12. UL REFERENCE E90723.



PACKING DETAILS



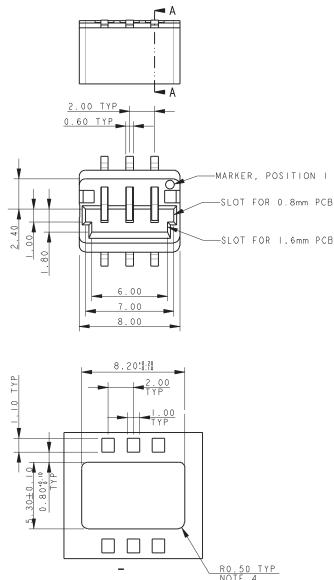






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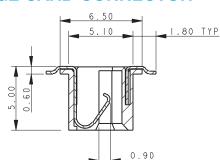
3 WAY THROUGH THE BOARD MATING EDGE CARD CONNECTOR



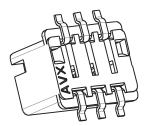
MOUNTING PCB (TOP SIDE)

NOTES:

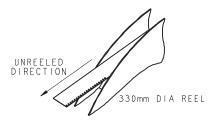
- 1. THROUGH THE BOARD 3 WAY EDGE CARD CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-136.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK.
- REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. UP TO 0.5MM RAD TO MATCH CONNECTOR PROFILE.
- 5. ALL DIMENSIONS ±0.20 UNLESS TOLERANCE SPECIFIED.
- 6. INSULATOR: PAR4T, GLASS FILLED, HALOGEN FREE, UL94 V-0, COLOR SEE PAGE 1.
- 7. CONTACT: COPPER ALLOW, NICKEL PLATED WITH GOLD FLASH ON NOSE AND TIN ON TAILS.
- 8. BRACKET: COPPER ALLOY, PLATING TIN OVER NICKEL.
- 9. PACKING IN TAPE AND REEL, 1000 PIECES PER REEL.
- 10. CONTACT TAILS COPLINARITY WITHIN 0.10.
- 11. REFER TO PAGE 10 FOR MATCHING PROTECTING CAP.
- 12. UL REFERENCE E90723.



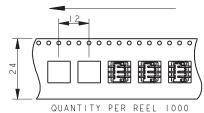
SECTION A-A



PACKING DETAILS



UNREELED DIRECTION

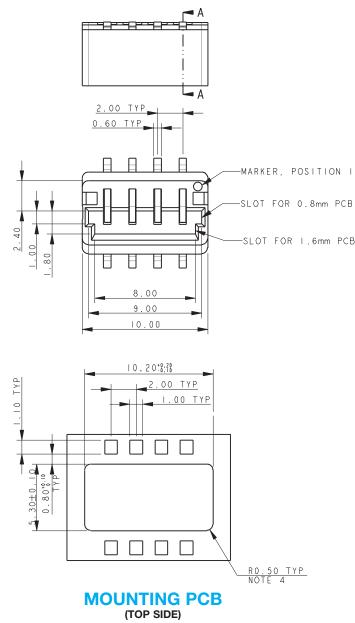






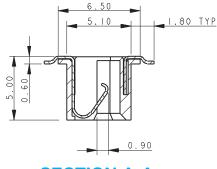
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4 WAY THROUGH THE BOARD MATING EDGE CARD CONNECTOR

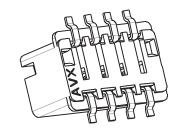




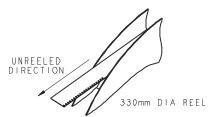
- 1. THROUGH THE BOARD 4 WAY EDGE CARD CONNECTOR, FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-136.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK.
- REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. UP TO 0.5MM RAD TO MATCH CONNECTOR PROFILE.
- 5. ALL DIMENSIONS ±0.20 UNLESS TOLERANCE SPECIFIED.
- 6. INSULATOR: PAR4T, GLASS FILLED, HALOGEN FREE, UL94 V-0, COLOR SEE PAGE 1.
- 7. CONTACT: COPPER ALLOW, NICKEL PLATED WITH GOLD FLASH ON NOSE AND TIN ON TAILS.
- 8. BRACKET: COPPER ALLOY, PLATING TIN OVER NICKEL.
- 9. PACKING IN TAPE AND REEL, 1000 PIECES PER REEL.
- 10. CONTACT TAILS COPLINARITY WITHIN 0.10.
- 11. REFER TO PAGE 10 FOR MATCHING PROTECTING CAP.
- 12. UL REFERENCE E90723.



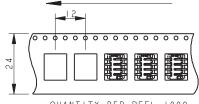
SECTION A-A



PACKING DETAILS



UNREELED DIRECTION



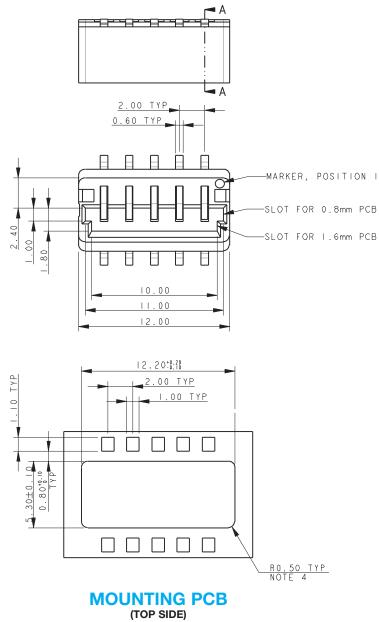
QUANTITY PER REEL 1000

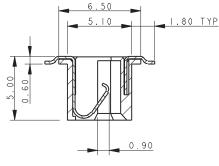




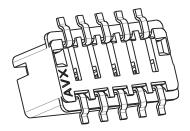
Series 00-9159

5 WAY THROUGH THE BOARD MATING EDGE CARD CONNECTOR





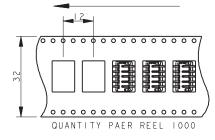
SECTION A-A







UNREELED DIRECTION



NOTES:

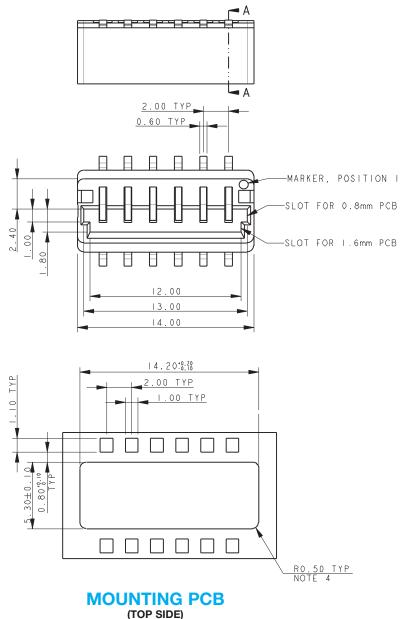
- 1. THROUGH THE BOARD 5 WAY EDGE CARD CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-136.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK.
- REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. UP TO 0.5MM RAD TO MATCH CONNECTOR PROFILE.
- 5. ALL DIMENSIONS ± 0.20 UNLESS TOLERANCE SPECIFIED.
- 6. INSULATOR: PAR4T, GLASS FILLED, HALOGEN FREE, UL94 V-0, COLOR SEE PAGE 1.
- 7. CONTACT: COPPER ALLOW, NICKEL PLATED WITH GOLD FLASH ON NOSE AND TIN ON TAILS.
- 8. BRACKET: COPPER ALLOY, PLATING TIN OVER NICKEL.
- 9. PACKING IN TAPE AND REEL, 1000 PIECES PER REEL.
- 10. CONTACT TAILS COPLINARITY WITHIN 0.10.
- 11. REFER TO PAGE 10 FOR MATCHING PROTECTING CAP.
- 12. UL REFERENCE E90723.

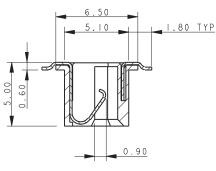




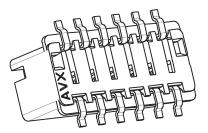
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6 WAY THROUGH THE BOARD MATING EDGE CARD CONNECTOR

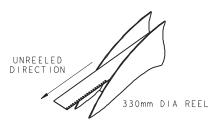




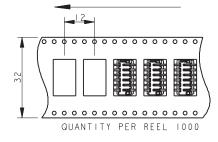
SECTION A-A







UNREELED DIRECTION



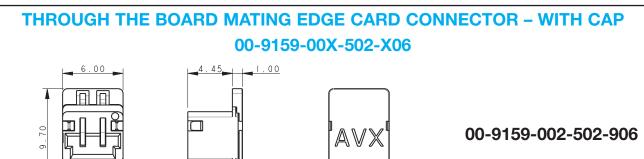
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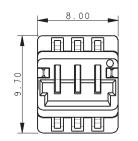
- 1. THROUGH THE BOARD 6 WAY EDGE CARD CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-136.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK.
- REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. UP TO 0.5MM RAD TO MATCH CONNECTOR PROFILE.
- 5. ALL DIMENSIONS ± 0.20 UNLESS TOLERANCE SPECIFIED.
- 6. INSULATOR: PAR4T, GLASS FILLED, HALOGEN FREE, UL94 V-0, COLOR SEE PAGE 1.
- 7. CONTACT: COPPER ALLOW, NICKEL PLATED WITH GOLD FLASH ON NOSE AND TIN ON TAILS.
- 8. BRACKET: COPPER ALLOY, PLATING TIN OVER NICKEL.
- 9. PACKING IN TAPE AND REEL, 1000 PIECES PER REEL.
- 10. CONTACT TAILS COPLINARITY WITHIN 0.10.
- 11. REFER TO PAGE 10 FOR MATCHING PROTECTING CAP.
- 12. UL REFERENCE E90723.

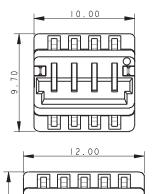


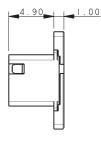


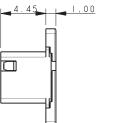
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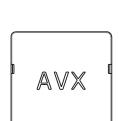








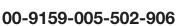


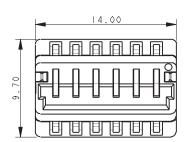


AVX

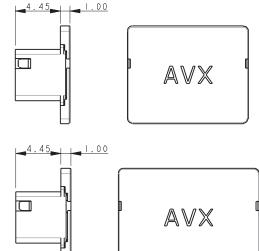
00-9159-003-502-906

00-9159-004-502-906





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00-9159-006-502-906

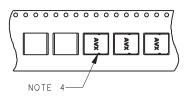


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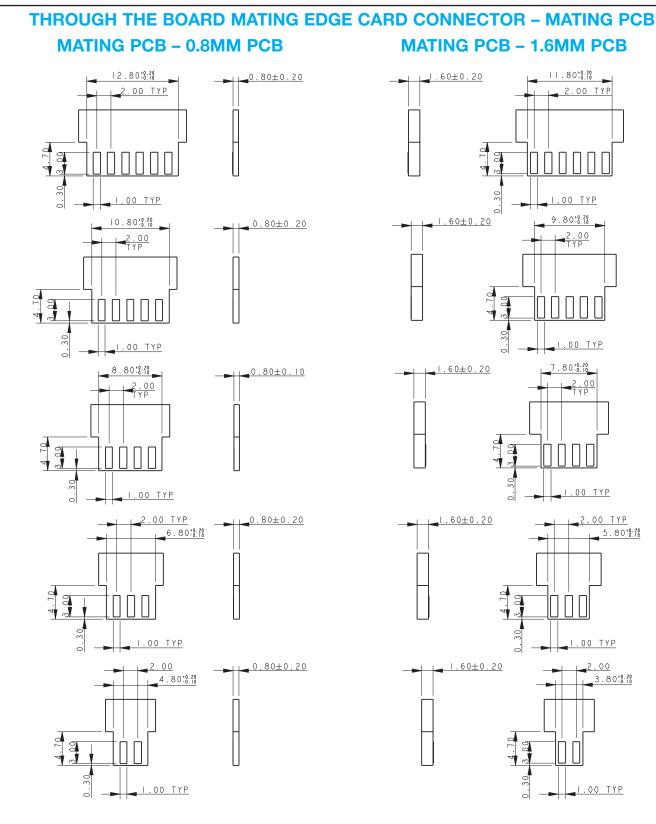
- 1. 00-9159-00X-501-X06 WITH CAP SUPPLIED FITTED.
- 2. DRAWINGS SHOW OUTLINE DIMENSIONS OF THE 00-9159-00X-502-X06 ASSEMBLIES. ALL OTHER DETAILS ARE AS 00-9159-00X-501-X06 ON PAGES 2-6.
- 3. GENERAL TOLERANCE ± 0.20 .
- 4. PACKING ORIENTATION.
- 5. UL REFERENCE E90723.

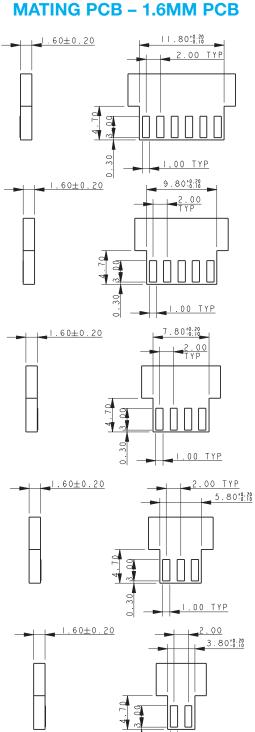






Series 00-9159





1.00 TYP

NOTES:

1. CORRECT DIMENSIONS FOR EITHER 0.80MM OR F1.60MM PCB THICKENSS MUST BE USED.

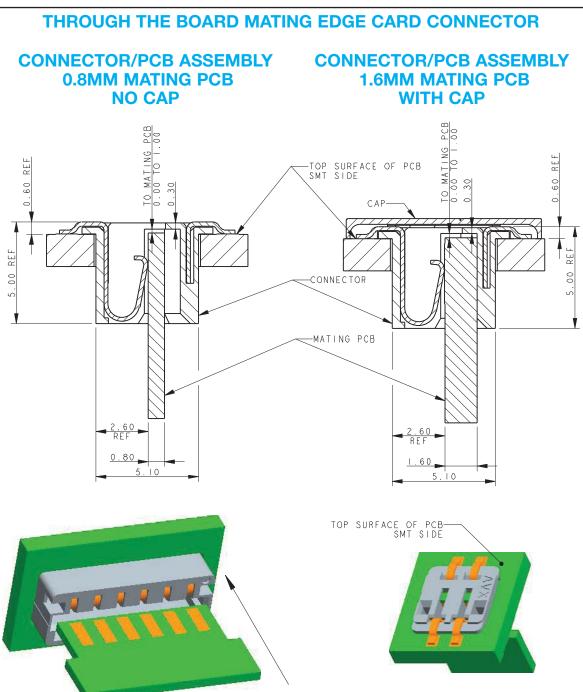
- 2. THICKNESS OF PCB INCLUDES ALL LAYERS INCLUDING COPPER AND PLATING.
- 3. PADS TO BE PLATED GOLD OVER NICKEL UNDERCOAT.

4. GENERAL TOLERANCE ±0.10 UNLESS STATED.





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BOARD INSERTED

NOTES:

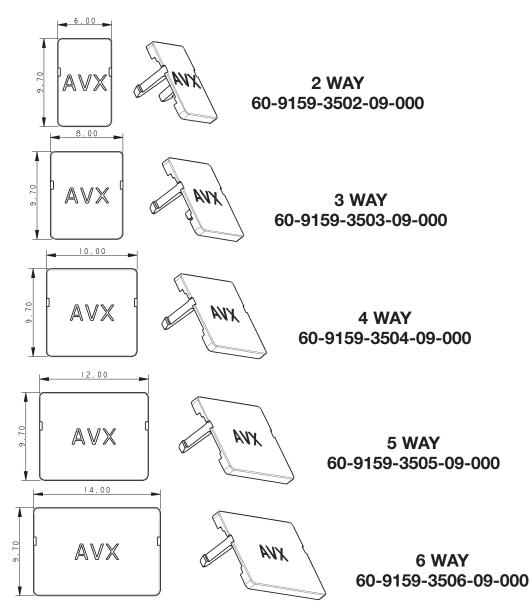
- 1. THROUGH THE BOARD EDGE CARD CONNECTOR.
- 2. FOR MATING PCB EITHER 0.8MM OR 1.6MM THICK. REFER TO PAGE 7 FOR MATING PCB DETAILS.
- 3. CONNECTOR TOP MOUNTING ON PCB.
- 4. PAD DETAILS ON THE MATING PCB ALLOW CONTACT TO BE MADE IN ANY POSITION FROM THE STOP FACE UP TO 1MM FROM THE STOP FACE.
- 5. GENERAL TOLERANCE ±0.20 UNLESS STATED.





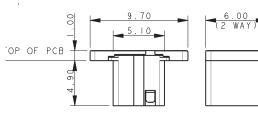
Series 00-9159

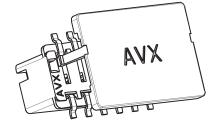
ACCESSORY – PROTECTING CAP



NOTES:

- 1. PROTECTING CAP, ACCESSORY, NOT SUPPLIED WITH CONNECTOR.
- 2. CLIPS TO TOP OF CONNECTOR TO COVE ALL METAL COMPONENTS.
- 3. MATERIAL: PA4T, GLASS FILLED, HALOGEN FREE, UL94 V-0. COLOR CODE REFER TO PAGE 1, "X" IN PART NUMBER.
- 4. SUPPLIED IN BAGS OF 100 PIECES.
- 5. GENERAL TOLERANCE ±0.20.
- 6. UL REFERENCE E90723.







ASSEMBLED CAP