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770166-1 Product Details

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770166-1

TE Internal Number: 770166-1

✔ Active

📄 View 3D PDF

.163" Centerline, 600 V, 9.5 A max.

Not EU RoHS or ELV Compliant (Find RoHS Compliant Alternates)

Product Highlights:

- Mini-Universal MATE-N-LOK Product Line
- Wire-to-Board
- Applies To Printed Circuit Board
- Connector
- Glow Wire Rating = Standard Part - Not Glow Wire

View all Features

Add to My Part List   Request Sample   Find Similar Products

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Quick Links

- ▷ Pricing & Availability
- ▷ Search for Tooling
- ▷ View Mating Products (2)
- ▷ Product Feature Selector
- ▷ Contact Us About This Product

Documentation & Additional Information

Product Drawings:

- HEADER ASSEMBLY, 2 CKT, MINI UNIVERSAL MATE-N-LOK (PDF, English)

Catalog Pages/Data Sheets:

- SOFT_SHELL_PIN_AND_SOCKET_CONNECTORS_CATALOG (PDF, English)

Product Specifications:

- None Available

Application Specifications:

- Mini-Universal MATE-N-LOK Connectors (PDF, English)

Instruction Sheets:

- Mini-Universal MATE-N-LOK Connectors (PDF, English)

CAD Files: (CAD Format & Compression Information)

- 2D Drawing (DXF, Version L)
- 3D Model (IGES, Version L)
- 3D Model (STEP, Version L)

List all Documents

Additional Information:

- Product Line Information

Related Products:

- Tooling
- Mating Products (2)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Product Line = Mini-Universal MATE-N-LOK
- Product Type = Connector
- Connector Type = Header
- PCB Mounting Orientation = Vertical
- PCB Mount Retention = With
- Sealed = No
- PCB Mount Retention Type = Boardlock(s)
- PCB Mount Alignment = Without
- CSA File Number = LR 7189

Mechanical Attachment:

- Contact Retention = Without

- Mating Retention Type = Locking Tab
- Panel Mount Retention = Without

Housing Features:

- Connector Style = Plug
- Housing Material = Nylon - GF
- Housing Color = White
- Mating Alignment = With
- Mating Alignment Type = Chamfered Edges
- Centerline (mm [in]) = 4.14 [0.163]

Configuration Features:

- Number of Rows = 1
- Number of Positions = 2
- Solder Process Drain Hole = With
- Strain Relief = Without

Industry Standards:

- RoHS/ELV Compliance = Not ELV/RoHS compliant

Electrical Characteristics:
- Contact - Rated Current (A) = 9.5
- Operating Voltage Reference = AC/DC
- Operating Voltage (VAC) = 600
- Operating Voltage (VDC) = 600

Termination Features:
- Termination Method to Wire/Cable = Solder
- Termination Method to PC Board = Through Hole - Solder

Dimensions:
- Tail Length (mm [in]) = 3.69 [0.145]
- PCB Thickness, Recommended (mm [in]) = 1.57 [0.062]

Body Features:
- Used With = Plug Housing
- Mating Retention = With
- Assembly Integration Feature = Without

Contact Features:
- Contact Type = Pin
- Contact Layout = In-Line
- Contact Diameter (mm [in]) = 1.00 [0.0394]
- Contact Base Material = Brass
- Contact Plating, Mating Area, Material = Matte Tin Lead
- Contact Plating, Mating Area, Thickness (μm [μin]) = 3.81 [150]
- Tail Plating Material = Matte Tin Lead
- Shunts/Shorting Bars = Without
- Multiple Contact Types = Without
- Tail Plating Thickness (μm [μin]) = 3.81 [150]
- Underplate Material = Nickel
- Underplate Material Thickness (μm [μin]) = 1.27 [50.000]

- Lead Free Solder Processes = Not suitable for lead free processing
- VDE Tested = Yes
- Agency/Standard = CSA, UL
- UL Rating = Recognized
- CSA Rating = Certified
- UL File Number = E28476
- UL Flammability Rating = UL 94V-0

Environmental:
- Operating Temperature (°C [°F]) = -20 – +105 [-4 – +221]

Conditions for Usage:
- Applies To = Printed Circuit Board
- Glow Wire Rating = Standard Part - Not Glow Wire

Operation/Application:
- Application Use = Wire-to-Board

Packaging Features:
- Packaging Method = Bag
- Packaging Quantity = 200

Other:
- Brand = AMP

LOC	DIST	REVISIONS						
CM	0	P	LTR	DESCRIPTION	DATE	DWN	APVD	
			L1	REVISED PER ECO-11-004587	11MAR11	RK	HMR	
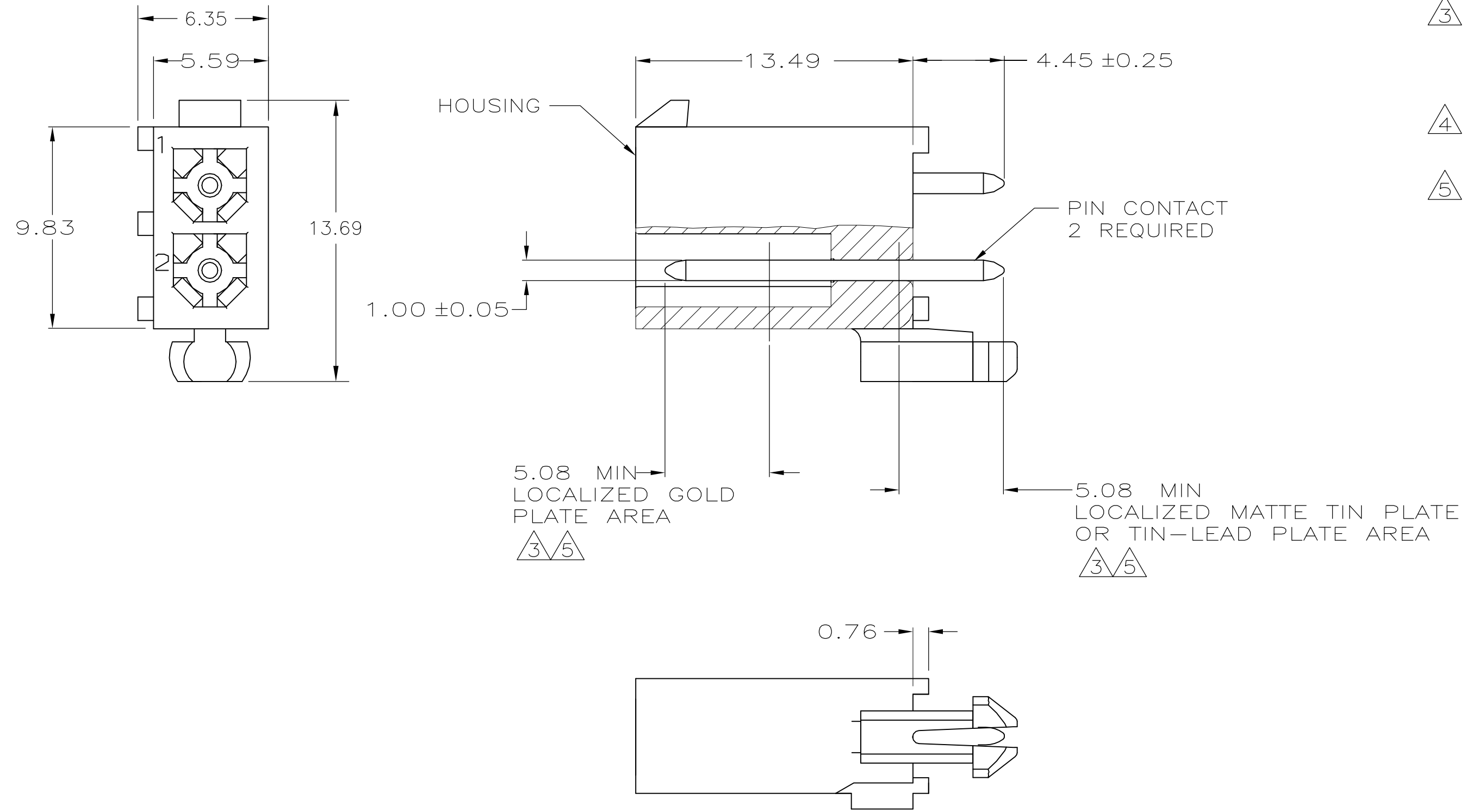
1. PINS TO COMPLY WITH AMP SOLDERABILITY SPEC. 109-11-3.

⚠2 0.00381 MIN MATTE TIN LEAD PLATE OVER 0.00127 MIN NICKEL.

⚠3 0.00076 MIN GOLD PLATE IN THE LOCALIZED PLATE AREA, 0.00381 MATTE TIN LEAD IN THE LOCALIZED PLATE AREA, BOTH OVER 0.00127 MIN NICKEL.

⚠4 0.00381 MIN MATTE TIN PLATE OVER 0.00127 MIN NICKEL.

⚠5 0.00076 MIN GOLD PLATE IN THE LOCALIZED PLATE AREA, 0.00381 MATTE TIN IN THE LOCALIZED PLATE AREA, BOTH OVER 0.00127 MIN NICKEL.

6.35

5.59

9.83

13.69

HOUSING

13.49

4.45 ±0.25

PIN CONTACT
2 REQUIRED

1.00 ±0.05

5.08 MIN
LOCALIZED GOLD
PLATE AREA
⚠3\5

5.08 MIN
LOCALIZED MATTE TIN PLATE
OR TIN-LEAD PLATE AREA
⚠3\5

0.76

4.45

Ø3.18

Ø1.40 ±0.08
TYP

4.14
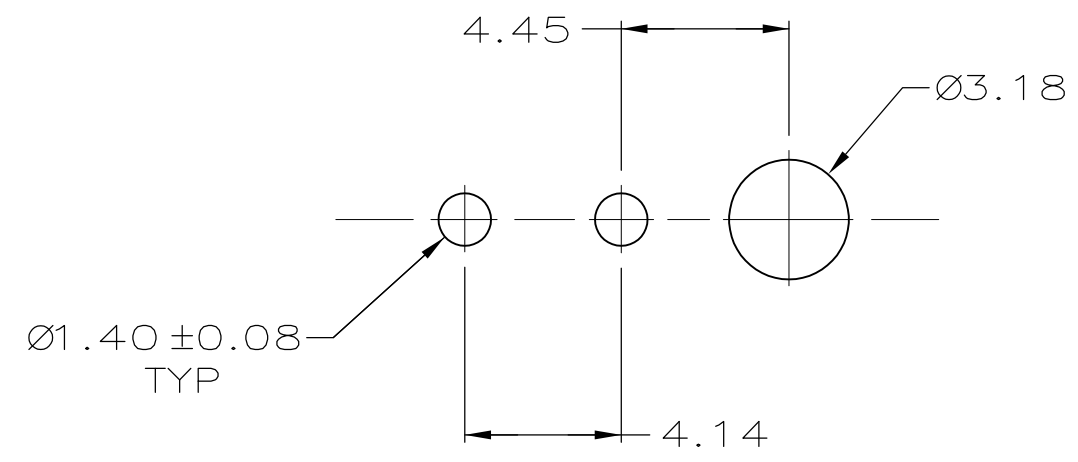
RECOMMENDED LAYOUT FOR 1.57 THICK BOARD
TOLERANCES NON-ACCUMULATIVE

770166

MATERIAL		MATERIAL	COLOR	PART NO.
BRASS, GOLD	⚠5	NYLON, UL94V-0	WHITE	1-770166-1
BRASS, TIN	⚠4	NYLON, UL94V-0	WHITE	1-770166-0
BRASS, GOLD	⚠3	NYLON, UL94V-0	WHITE	770166-2
BRASS, TIN-LEAD	⚠2	NYLON, UL94V-0	WHITE	770166-1
MATERIAL	FINISH	MATERIAL	COLOR	PART NO.
PIN		HOUSING		

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN	S CARPENTER 08JUN05
CHK	28JUL2003 R JONES
APVD	28JUL2003 R JONES

DIMENSIONS:
INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	± –
1 PLC	± –
2 PLC	± 0.13
3 PLC	± –
4 PLC	± –
ANGLES	± –

≡TE   TE Connectivity

NAME
HEADER ASSEMBLY, 2 CKT,
MINI UNIVERSAL MATE-N-LOK
–

PRODUCT SPEC
–

APPLICATION SPEC
–

MATERIAL
–

FINISH
–

WEIGHT
–

SIZE	CAGE CODE	DRAWING NO		RESTRICTED TO
A2	00779	C-770166		–

CUSTOMER DRAWING

SCALE	SHEET	REV
5:1	1 OF 1	L1

1471-9 (3/11)