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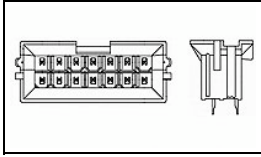
# 1-1586586-6 Product Details

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**1-1586586-6**

TE Internal Number: 1-1586586-6

✓ Active

📄 View 3D PDF

## VAL-U-LOK Series Connector System

🌿 Always EU RoHS/ELV Compliant (Statement of Compliance)

**Product Highlights:**
- Wire-to-Board
- Applies To Printed Circuit Board
- Connector
- Glow Wire Rating = Standard Part - Not Glow Wire
- Header

View all Features

**Quick Links**
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- ▶ View Mating Products (2)
- ▶ Product Feature Selector
- ▶ Contact Us About This Product

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## Documentation & Additional Information

**Product Drawings:**
- VERTICAL HEADER ASSEMBLY - BLINDMATE WITHOUT DRAIN H... (PDF, English)

**Catalog Pages/Data Sheets:**
- SOFT_SHELL_PIN_AND_SOCKET_CONNECTORS_CATALOG (PDF, English)

**Product Specifications:**
- VAL-U-LOK Connectors (PDF, English)

**Application Specifications:**
- VAL-U-LOK Series Headers and Connectors (PDF, English)

**Instruction Sheets:**
- None Available

**CAD Files:** (CAD Format & Compression Information)
- 2D Drawing (DXF, Version A1)
- 3D Model (IGES, Version A1)
- 3D Model (STEP, Version A1)

**Related Products:**
- Tooling
- Mating Products (2)

List all Documents

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

**Product Type Features:**
- Product Type = Connector
- Connector Type = Header
- PCB Mounting Orientation = Vertical
- PCB Mount Alignment = With
- PCB Mount Retention = With
- PCB Mount Retention Type = Boardlock(s)
- Sealed = No
- UL File Number = E28476
- CSA File Number = 208567

**Mechanical Attachment:**
- Mating Retention Type = Latching

**Electrical Characteristics:**
- Contact Current Rating, Max. (A) = 9
- Operating Voltage Reference = AC
- Operating Voltage (VAC) = 600

**Termination Features:**
- Wire/Cable Size (AWG) = 16 – 26
- Wire/Cable Size (mm²) = 0.12 – 1.4
- Termination Method to PC Board = Through Hole - Solder

**Dimensions:**
- PCB Thickness, Recommended (mm [in]) = 1.60 [0.063]
- Tail Length (mm [in]) = 3.5 [0.138]
- Length (X-Axis) (mm [in]) = 40.20 [1.580]
- Width (Z-Axis) (mm [in]) = 15.00 [0.5905]
- Profile Height (Y-Axis) (mm [in]) = 14.10 [0.555]

**Body Features:**
- Header Type = Shrouded
- Mating Retention = With
- Selectively Loaded = No

**Housing Features:**
- Connector Style = Plug
- Centerline (mm [in]) = 4.20 [0.165]
- Mating Alignment = With
- Mating Alignment Type = Keyed
- Housing Color = Natural
- UL Flammability Rating = UL 94V-2

**Configuration Features:**
- Number of Positions = 16
- Number of Rows = 2
- Tail Orientation = In-line
- Shrouded = Yes

**Industry Standards:**
- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Wave solder capable to 240°C, Wave solder capable to 260°C, Wave solder capable to 265°C
- RoHS/ELV Compliance History = Always was RoHS compliant
- Agency/Standard = UL, CSA
- UL Rating = Recognized

**Identification Marking:**
- Circuit Identification Feature = With

**Environmental:**
- Operating Temperature (°C [°F]) = -40 – +105 [-40 – +221]

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

**Operation/Application:**
- Application Use = Wire-to-Board
- Contact Transmits (Typical Application) = Signal (Data)
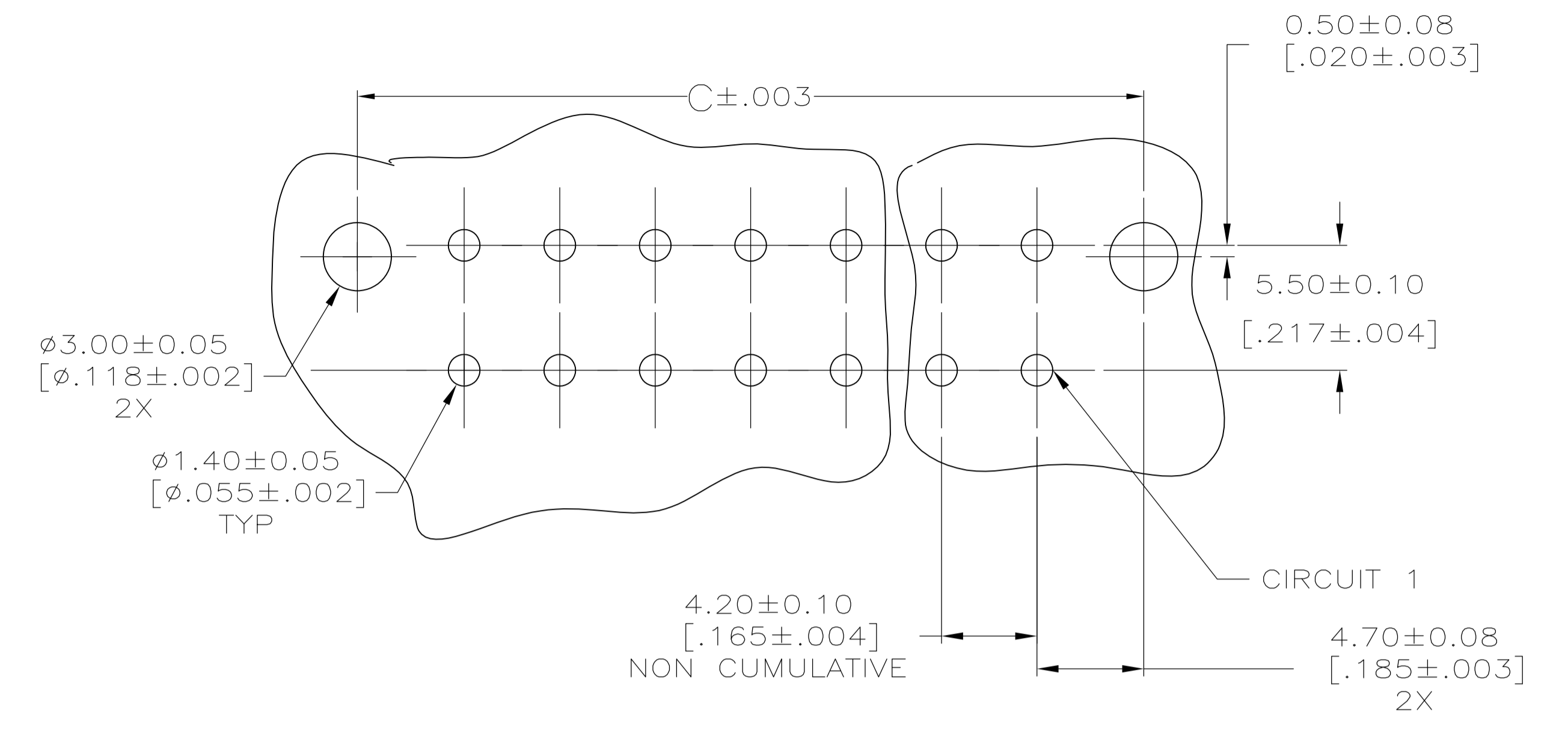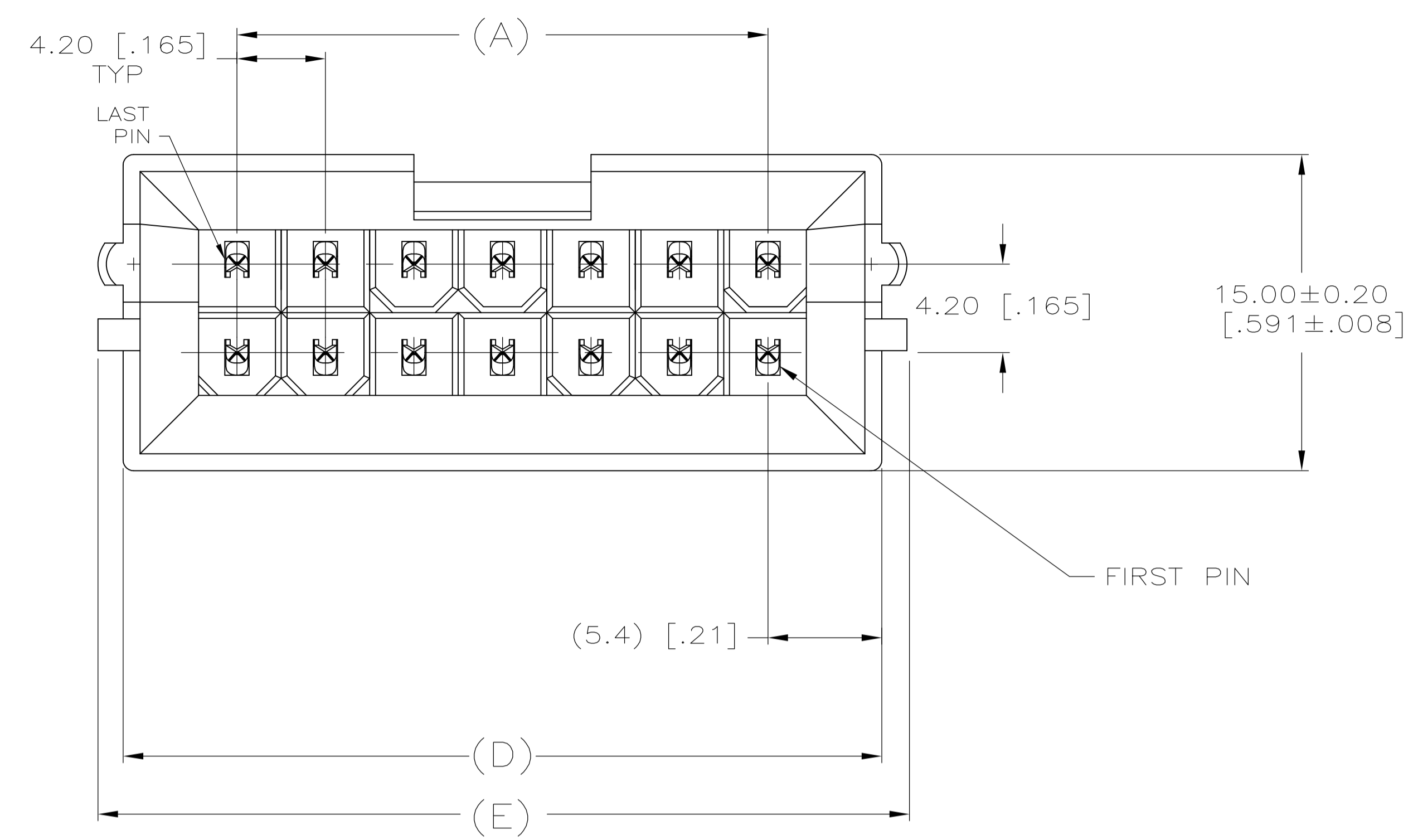- Pick and Place Cover = Without

**Contact Features:**
- Contact Type = Pin
- Contact Base Material = Brass
- Contact Plating, Mating Area, Material = Tin
- Contact Plating, Mating Area, Thickness (μm [μin]) = 2.54 [100]
- Contact Plating, Termination Area, Material = Tin
- Contact Plating, Termination Area, Thickness (μm [μin]) = 2.54 [100]
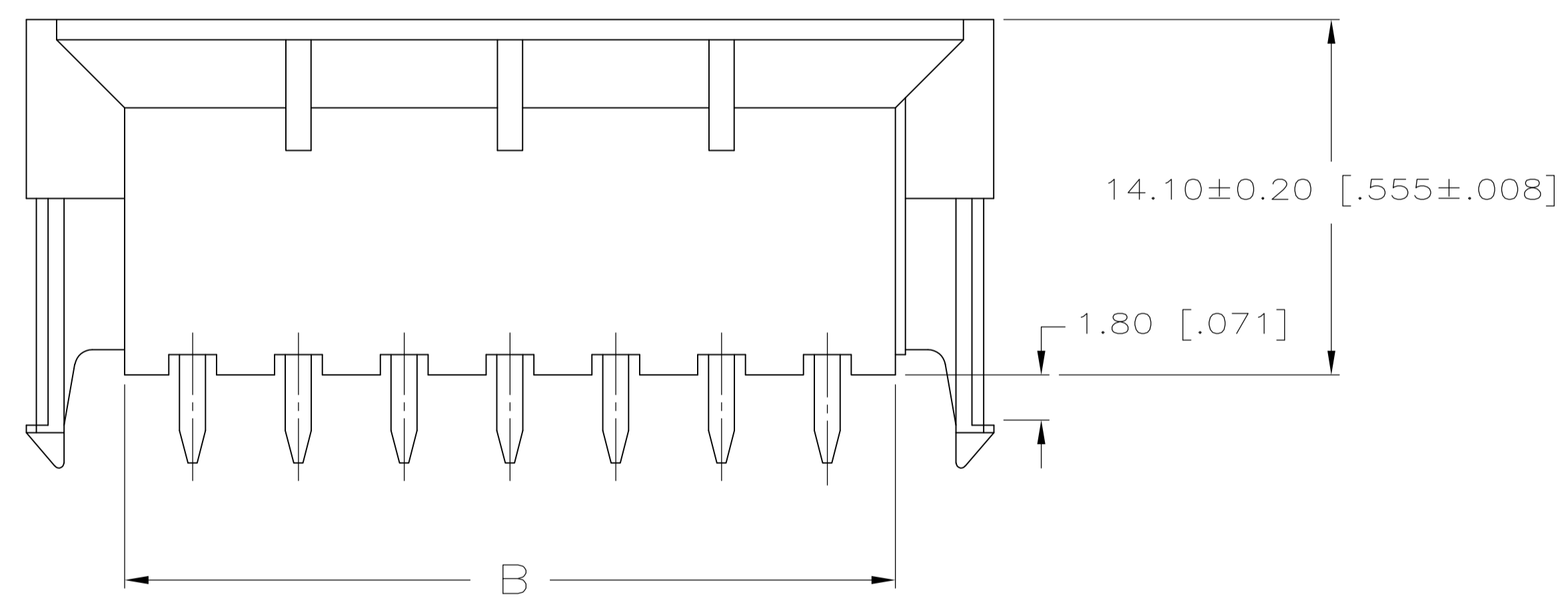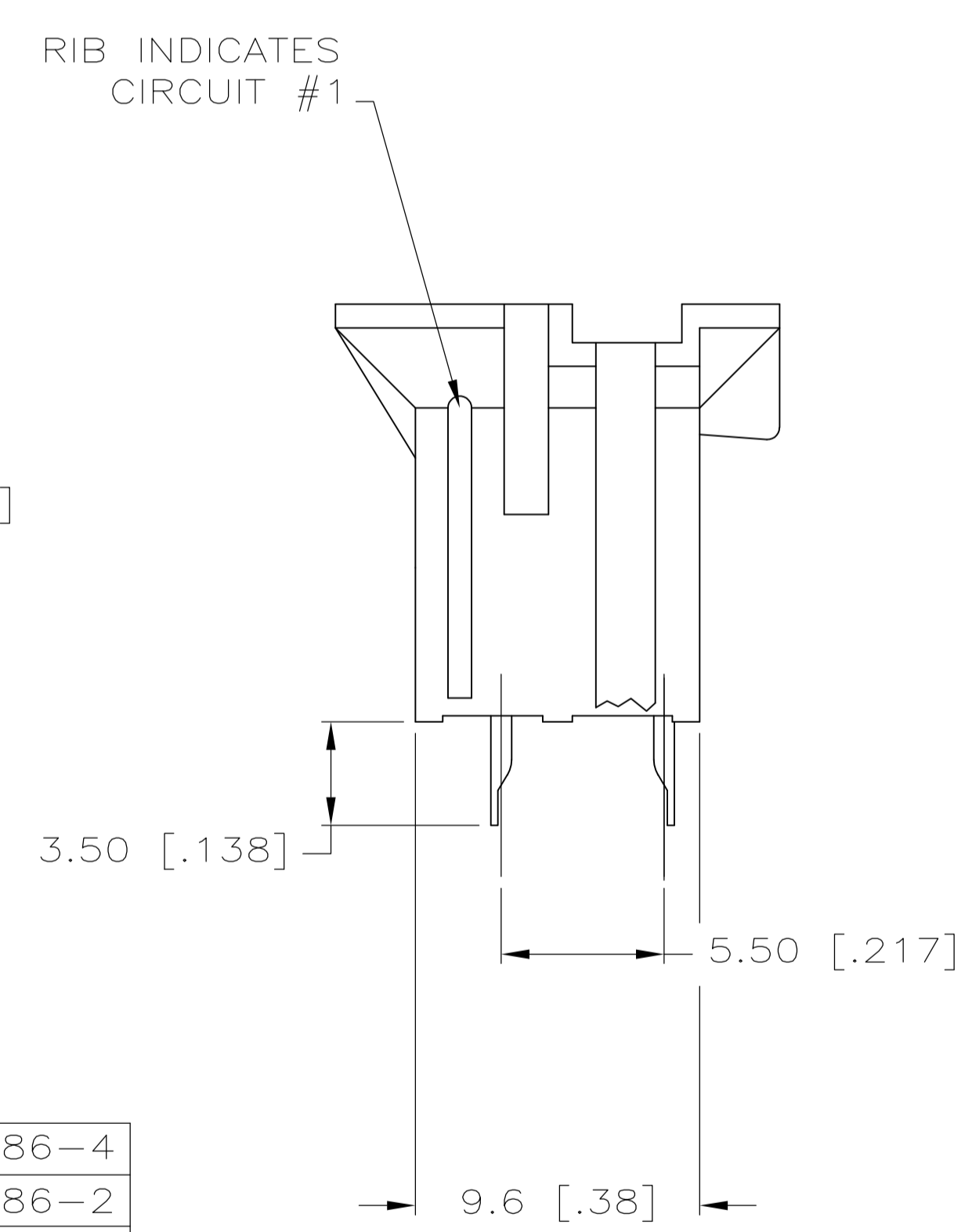- Contact Design = Square Post

**Packaging Features:**
- Packaging Method = Tray

**Other:**
- Brand = AMP

| LOC CM | DIST 00 | REVISIONS | | | |
|---|---|---|---|---|---|
| P | LTR | DESCRIPTION | DATE | DWN | APVD |
| | A1 | REVISED PER ECO-08-031186 | 15DEC08 | HMR | CC |

4.20 [.165]
TYP

(A)

LAST PIN

15.00±0.20 [.591±.008]

4.20 [.165]

FIRST PIN

(5.4) [.21]

(D)

(E)

0.50±0.08 [.020±.003]

C±.003

5.50±0.10 [.217±.004]

∅3.00±0.05 [∅.118±.002] 2X

∅1.40±0.05 [∅.055±.002] TYP

CIRCUIT 1

4.20±0.10 [.165±.004] NON CUMULATIVE

4.70±0.08 [.185±.003] 2X

RECOMMENDED HOLE LAYOUT FOR 1.78 [.070] MAXIMUM THICK PC BOARD.

RIB INDICATES CIRCUIT #1

14.10±0.20 [.555±.008]

1.80 [.071]

B

3.50 [.138]

5.50 [.217]

9.6 [.38]

⚠1 MATERIAL: HOUSING—NYLON, UL94V-2 (COLOR—NATURAL, COLOR OF PARTS MAY VARY). CONTACTS—0.25 [.010] THICK BRASS ALLOY

⚠2 CONTACT FINISH: 0.000100 [.0000039] MIN. MATTE TIN OVER 0.000050 [.0000020] MIN. NICKEL OVER ENTIRE CONTACT.

3 MATES WITH 4.2mm P.E. RECEPTACLE HOUSINGS.

| (E) | (D) | C | B | (A) | POS | PART NUMBER |
|---|---|---|---|---|---|---|
| 59.4 [2.32] | 57.0 [2.24] | 55.6 [2.19] | 51.6 [2.03] | 46.2 [1.82] | 24 | 2-1586586-4 |
| 55.2 [2.17] | 52.0 [2.08] | 51.4 [2.02] | 47.4 [1.87] | 42.0 [1.65] | 22 | 2-1586586-2 |
| 51.0 [2.01] | 48.6 [1.91] | 47.2 [1.86] | 43.2 [1.70] | 37.8 [1.49] | 20 | 2-1586586-0 |
| 46.8 [1.84] | 44.4 [1.75] | 43.0 [1.69] | 39.0 [1.54] | 33.6 [1.32] | 18 | 1-1586586-8 |
| 42.6 [1.69] | 40.2 [1.58] | 38.8 [1.53] | 34.8 [1.37] | 29.4 [1.58] | 16 | 1-1586586-6 |
| 38.4 [1.51] | 36.0 [1.42] | 34.6 [1.36] | 30.6 [1.20] | 25.2 [0.99] | 14 | 1-1586586-4 |
| 34.2 [1.35] | 31.8 [1.25] | 30.4 [1.20] | 26.4 [1.04] | 21.0 [0.83] | 12 | 1-1586586-2 |
| 30.0 [1.18] | 27.6 [1.09] | 26.2 [1.03] | 22.2 [.87] | 16.8 [0.66] | 10 | 1-1586586-0 |
| 25.8 [1.02] | 23.4 [.92] | 22.0 [0.87] | 18.0 [.71] | 12.6 [0.50] | 8 | 1586586-8 |
| 21.6 [.85] | 19.2 [.76] | 17.8 [0.70] | 13.8 [54] | 8.4 [0.33] | 6 | 1586586-6 |
| 17.4 [.69] | 15.0 [.59] | 13.6 [0.54] | 9.6 [.38] | 4.2 [0.17] | 4 | 1586586-4 |
| 13.2 [.52] | 10.8 [.43] | 9.4 [.37] | 5.4 [.21] | —— | 2 | 1586586-2 |

METRIC