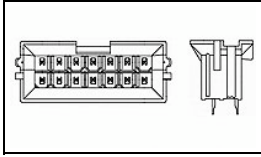


## 1-1586586-8 Product Details

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1-1586586-8

TE Internal Number: 1-1586586-8

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

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

[Add to My Part List](#) [Request Sample](#) [Find Similar Products](#) [Buy Product](#)

### 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)

[List all Documents](#)

#### Related Products:

- [Tooling](#)
- [Mating Products \(2\)](#)

### 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 (mm<sup>2</sup>) = 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]) = 44.40 [1.748]
- 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 = 18
- 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:**

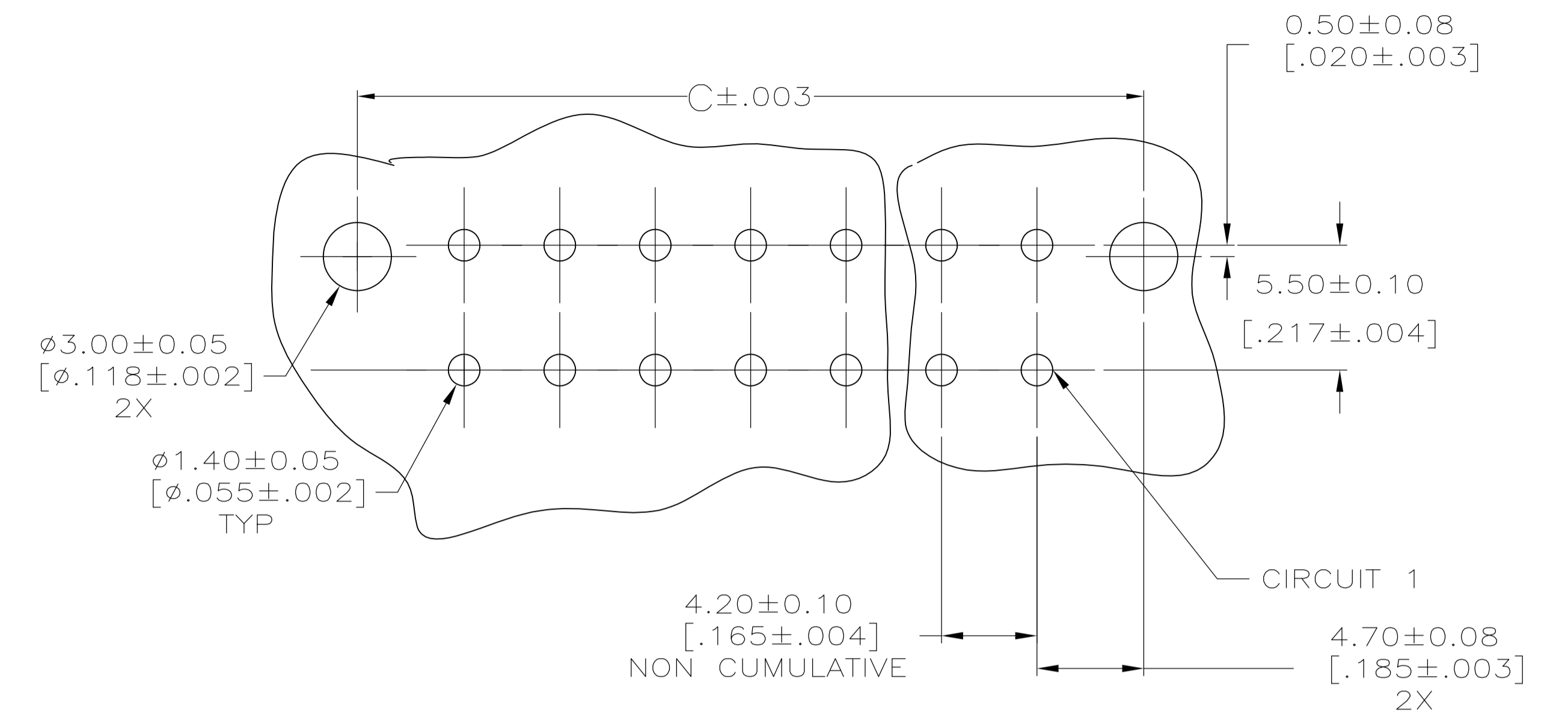
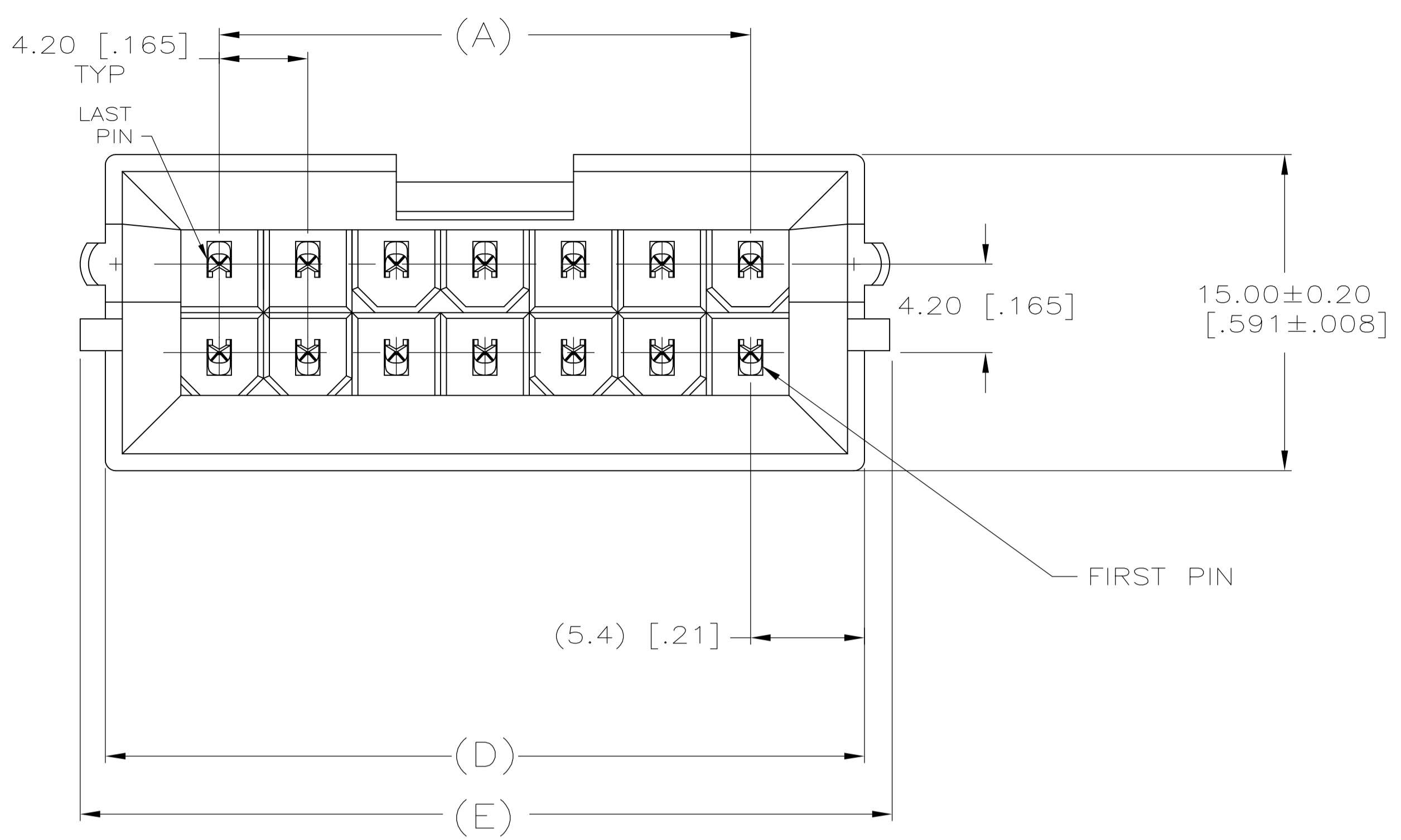
- Contact Type = Pin
- Contact Base Material = Brass
- Contact Plating, Mating Area, Material = Tin
- Contact Plating, Mating Area, Thickness ( $\mu\text{m}$  [ $\mu\text{in}$ ]) = 2.54 [100]
- Contact Plating, Termination Area, Material = Tin
- Contact Plating, Termination Area, Thickness ( $\mu\text{m}$  [ $\mu\text{in}$ ]) = 2.54 [100]
- Contact Design = Square Post

**Packaging Features:**

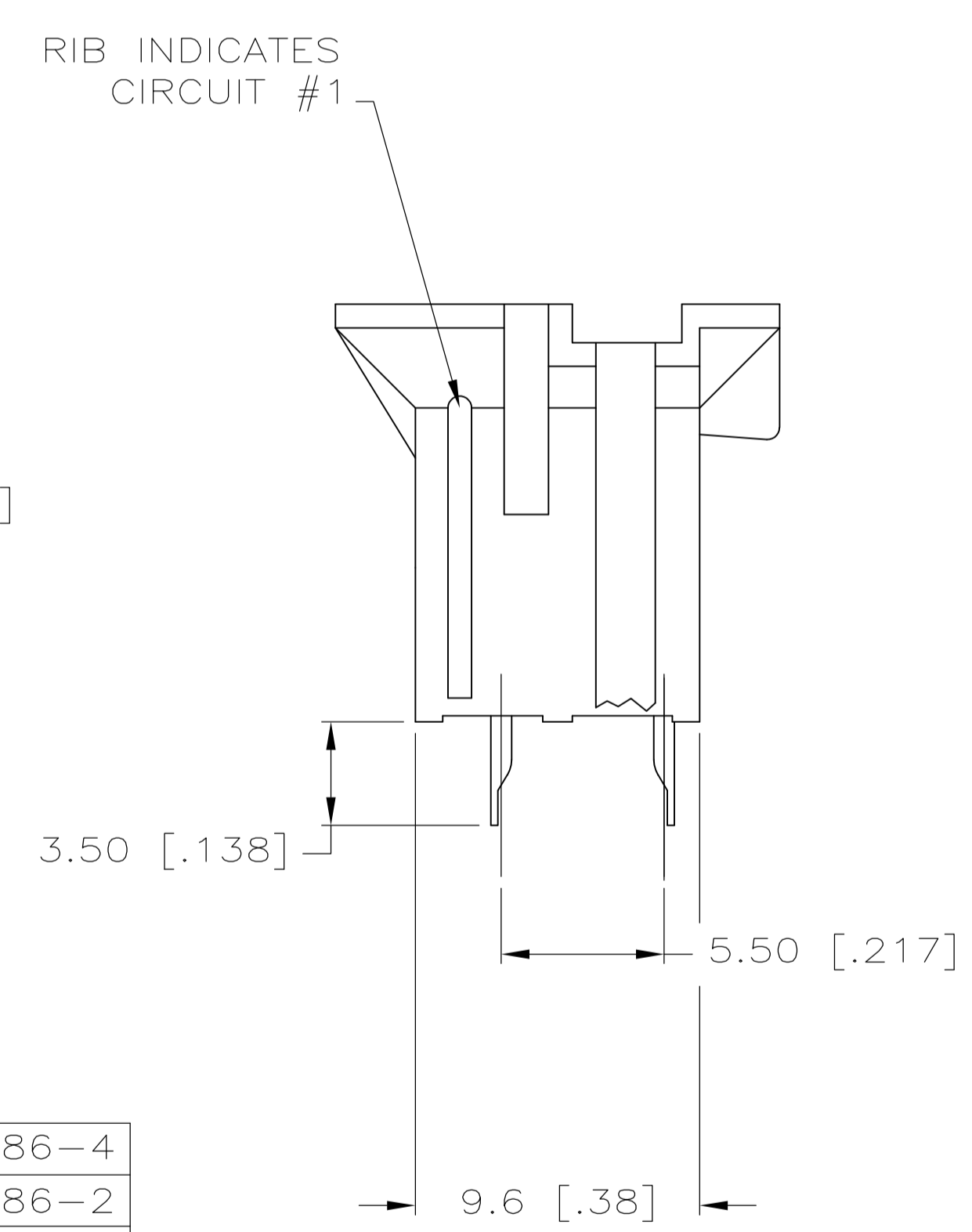
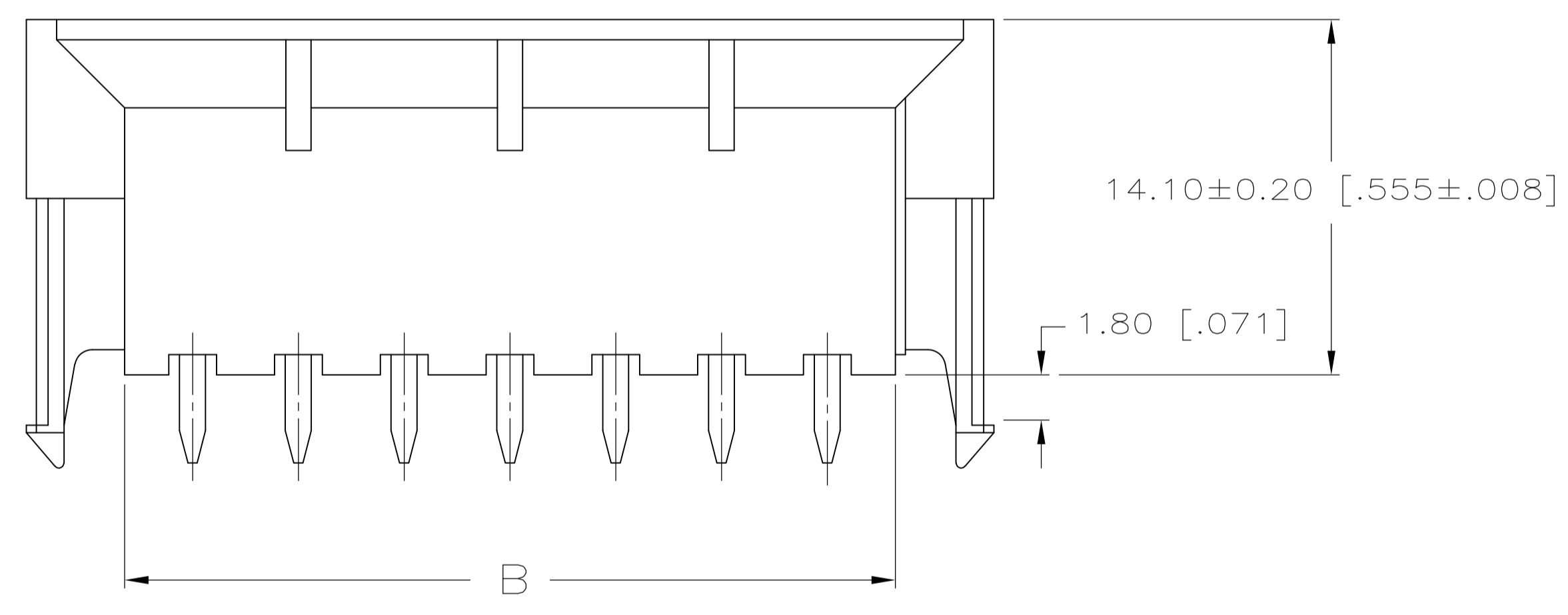
- Packaging Method = Tray

**Other:**

- Brand = AMP



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



- 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.

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

(E)	(D)	C	B	(A)	POS	PART NUMBER
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**METRIC**

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN S. HOOVER 12-NOV-2004	Tyco Electronics Corporation Harrisburg, PA 17105-3608
DIMENSIONS: mm [INCHES]		CHK: D. COLEY 12-NOV-2004	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: D. COLEY 12-NOV-2004	NAME: D. COLEY
0 PLC ±	1 PLC ±	2 PLC ± 0.13 [.005]	PRODUCT SPEC
3 PLC ±	4 PLC ±	ANGLES ± 0°30'	APPLICATION SPEC
MATERIAL 1	FINISH 2	SIZE: A1	CAGE CODE: 00779
CUSTOMER DRAWING		DRAWING NO: 1586586	RESTRICTED TO: REV A1
SCALE: 5:1		SHEET: 1 OF 1	REV: A1