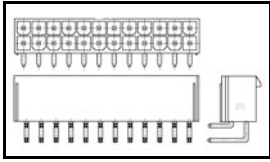


## 1586041-2 Product Details

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**1586041-2**

TE Internal Number: 1586041-2

 Active

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### 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](#)
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- ▶ [View Mating Products \(2\)](#)
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### Documentation & Additional Information

#### Product Drawings:

- [RIGHT ANGLE HEADER, WITHOUT PEGS VAL-U-LOK\(TM\)](#) (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 B)
- [3D Model](#) (IGES, Version B)
- [3D Model](#) (STEP, Version B)

[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
- Termination Method to PC Board = Through Hole - Solder
- PCB Mounting Orientation = Right Angle
- PCB Mount Alignment = Without
- PCB Mount Retention = Without
- Shrouded = Yes
- Sealed = No
- UL File Number = E28476
- CSA File Number = 208567

#### Mechanical Attachment:

- Mating Retention Type = Latching

#### 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 = 2
- Number of Rows = 2

#### Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Wave solder capable

**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
- Tail Orientation = In-line
- Tail Length (mm [in]) = 3.5 [0.138]

**Dimensions:**

- PCB Thickness, Recommended (mm [in]) = 1.60 [0.063]
- Length (X-Axis) (mm [in]) = 5.40 [0.213]
- Width (Z-Axis) (mm [in]) = 13.00 [0.5118]
- Profile Height (Y-Axis) (mm [in]) = 9.80 [0.386]

**Body Features:**

- Header Type = Shrouded
- Mating Retention = With
- Selectively Loaded = No

**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

to 260°C, Wave solder capable to 240°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

**Packaging Features:**

- Packaging Method = Tray

**Other:**

- Brand = AMP

**Corporate Information**

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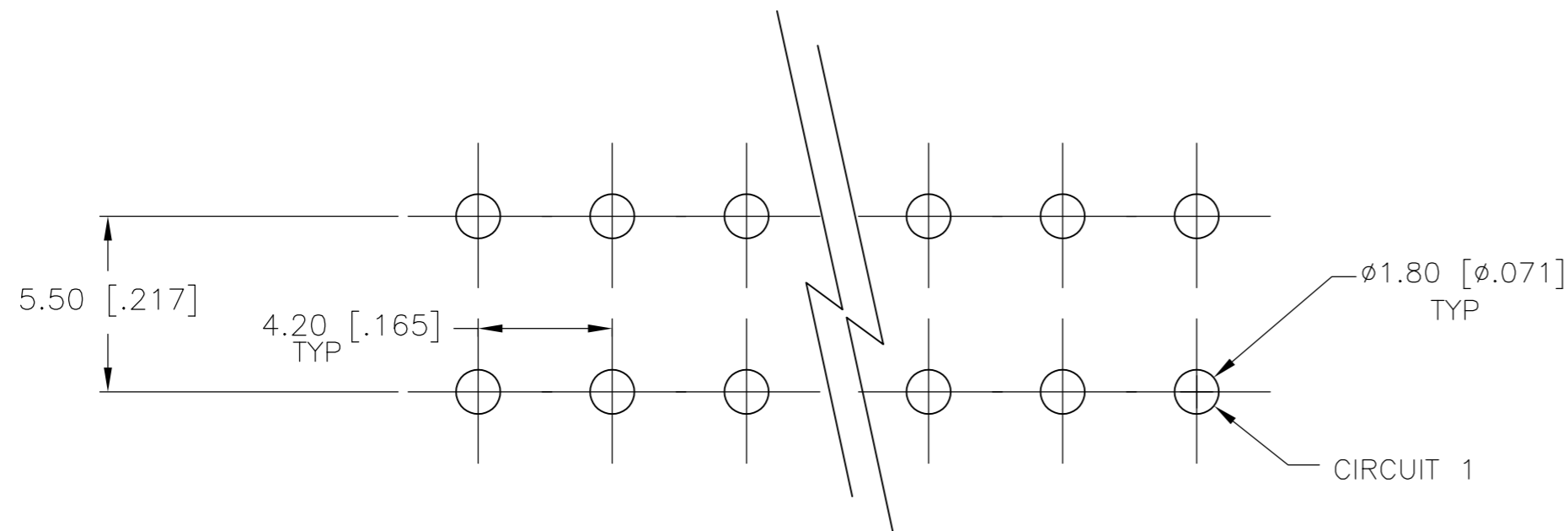
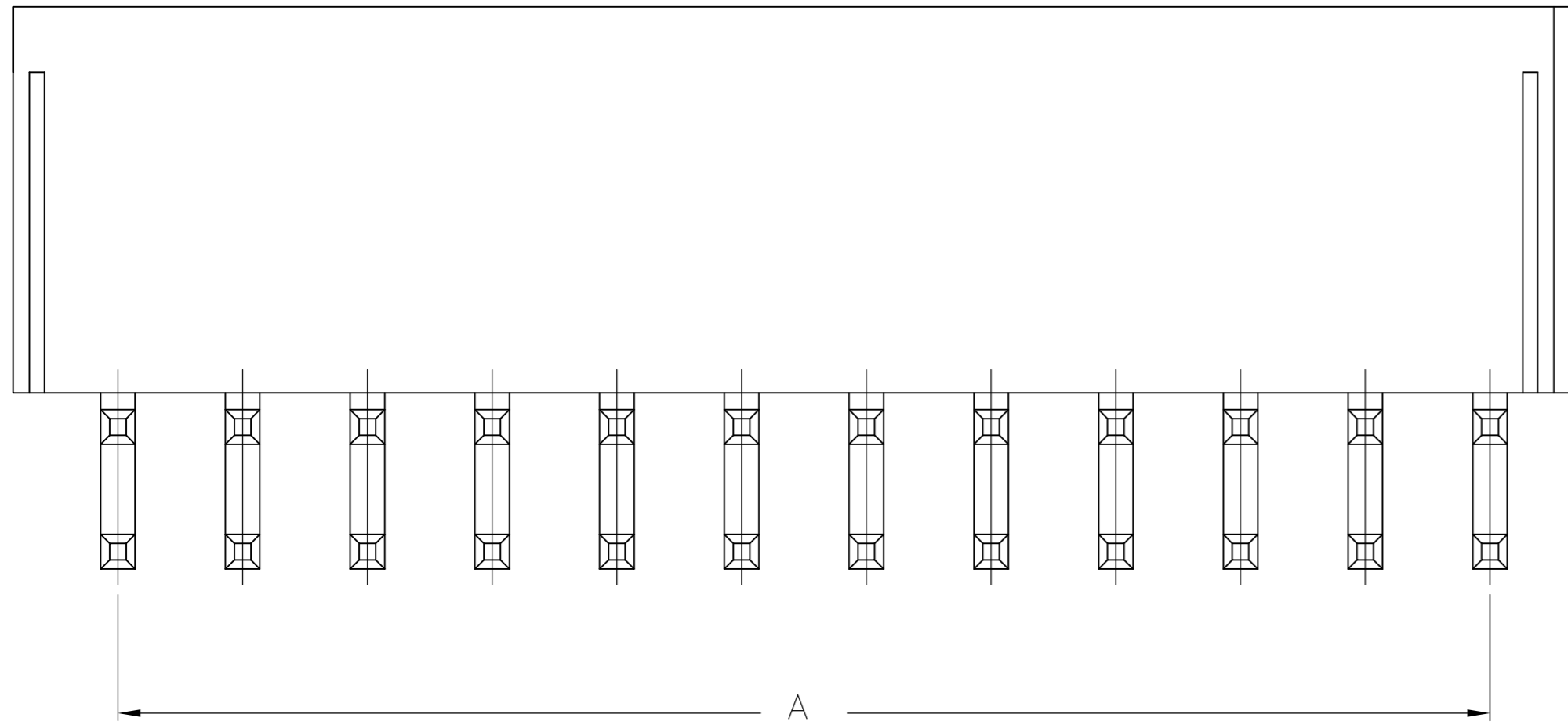
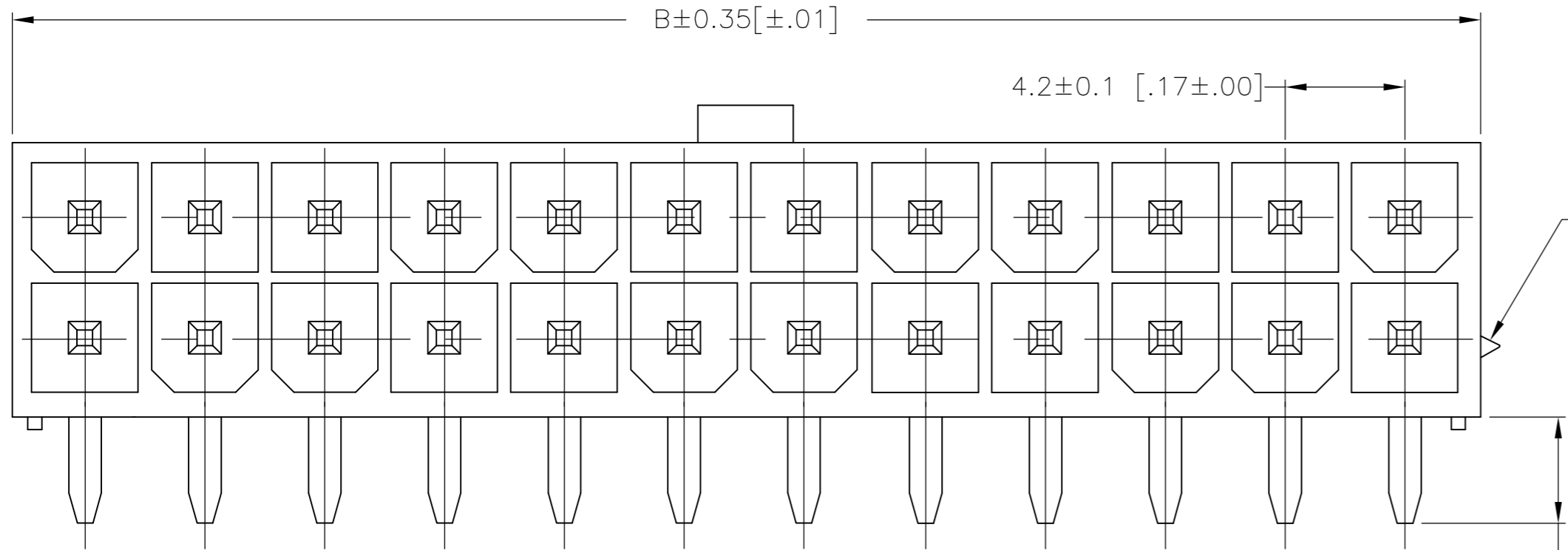
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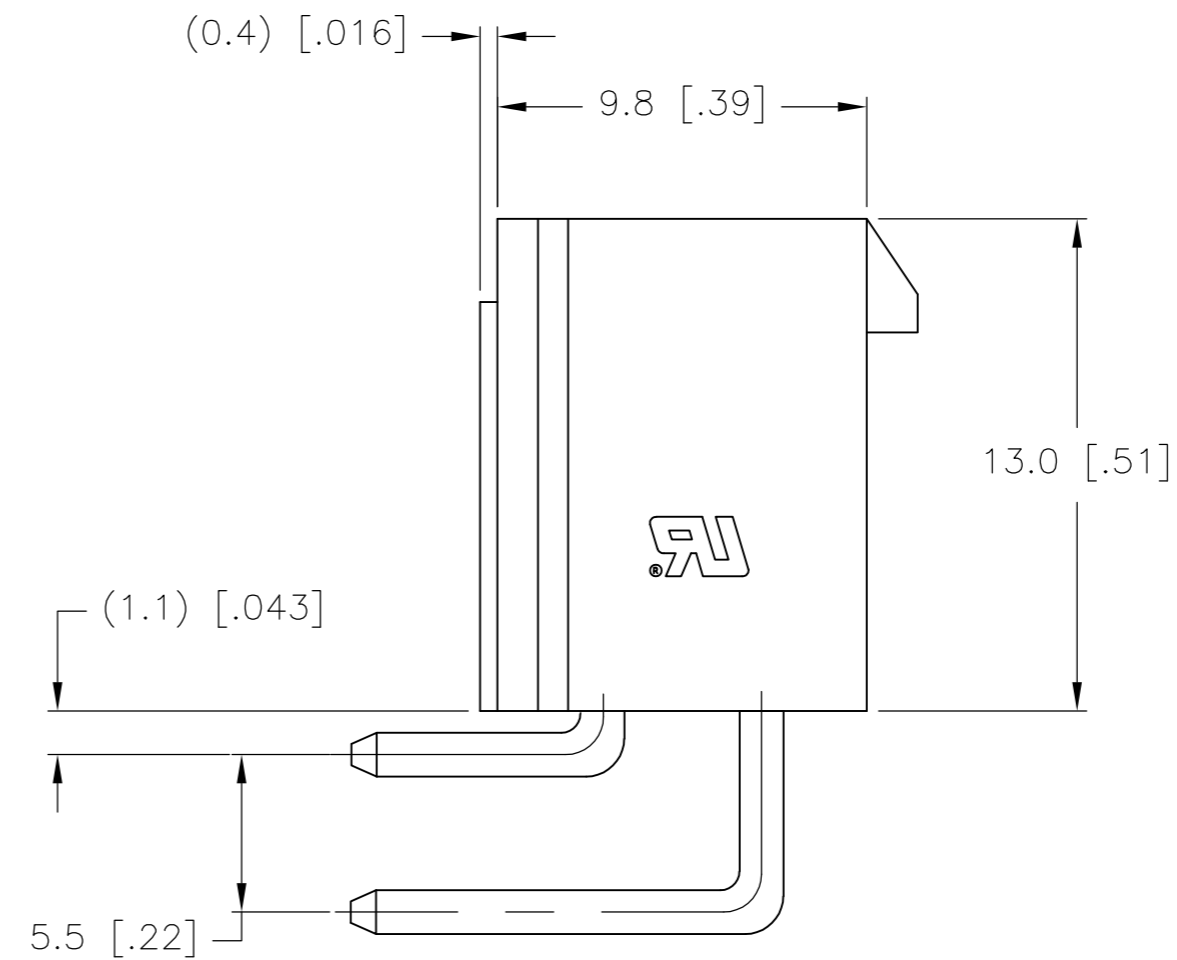
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| LOC |     | DIST        |                           | REVISIONS |         |      |    |
|-----|-----|-------------|---------------------------|-----------|---------|------|----|
| P   | LTR | DESCRIPTION |                           | DATE      | DWN     | APVD |    |
| CM  | 00  | B2          | REVISED PER ECO-11-017436 |           | 29AUG11 | HMR  | SM |



PCB LAYOUT: COMPONENT SIDE  
 RECOMMENDED BOARD THICKNESS 1.60 [.063]

- 1 MATERIAL: HOUSING-NYLON, UL94V-2 (COLOR-NATURAL, COLOR OF PARTS MAY VARY) CONTACTS-0.25 [.010] THICK BRASS ALLOY.
- 2 CONTACT FINISH: 0.002032 [.000080] MIN MATTE TIN OVER 0.000381 [.000015] MIN NICKEL OVER ENTIRE CONTACT.
- 3 MATES WITH VAL-U-LOK(TM) RECEPTACLE HOUSINGS.



2-1586041-4 SHOWN

|     |                     |              |             |
|-----|---------------------|--------------|-------------|
| 2   |                     | 5.4 [.21]    | 1586041-2   |
| 4   | 4.2±0.1 [.17±.00]   | 9.6 [.38]    | 1586041-4   |
| 6   | 8.4±0.1 [.33±.00]   | 13.8 [.54]   | 1586041-6   |
| 8   | 12.6±0.1 [.50±.00]  | 18.0 [.71]   | 1586041-8   |
| 10  | 16.8±0.1 [.66±.00]  | 22.2 [.87]   | 1-1586041-0 |
| 12  | 21.0±0.2 [.83±.01]  | 26.4 [1.04]  | 1-1586041-2 |
| 14  | 25.2±0.2 [.99±.01]  | 30.6 [1.21]  | 1-1586041-4 |
| 16  | 29.4±0.2 [1.16±.01] | 34.8 [1.37]  | 1-1586041-6 |
| 18  | 33.6±0.2 [1.32±.01] | 39.0 [1.54]  | 1-1586041-8 |
| 20  | 37.8±0.2 [1.49±.01] | 43.2 [1.70]  | 2-1586041-0 |
| 22  | 42.0±0.2 [1.65±.01] | 47.4 [1.87]  | 2-1586041-2 |
| 24  | 46.2±0.2 [1.82±.01] | 51.6 [2.03]  | 2-1586041-4 |
| POS | A                   | B±0.35[±.01] | PART NUMBER |

|  |                     |                           |  |                 |
|--|---------------------|---------------------------|--|-----------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                     | DWN S. HOOVER 18-SEP-2002 |  |                 |
| DIMENSIONS: mm [INCHES]                |                     | CHK D. COLEY 18-SEP-2002  |  |                 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |                     | APVD D. COLEY 18-SEP-2002 | NAME   |                 |
| 0 PLC ±                                | 1 PLC ±             | PRODUCT SPEC              | RIGHT ANGLE HEADER, WITHOUT PEGS VAL-U-LOK(TM) |                 |
| 2 PLC ± 0.5 [.02]                      | 3 PLC ± 0.25 [.010] | APPLICATION SPEC          | SIZE A2  | CAGE CODE 00779 |
| 4 PLC ± 0.150 [0059]                   | ANGLES ±            | WEIGHT                    | DRAWING NO C=1586041                           | RESTRICTED TO - |
| MATERIAL 1                             | FINISH 2            | CUSTOMER DRAWING          | SCALE 10:1                                     | SHEET 1 of 1    |
|  |                     |                           | REV B2   |                 |