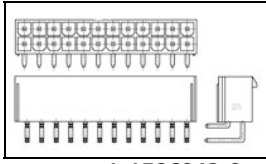


1-1586042-0 Product Details

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1-1586042-0

TE Internal Number: 1-1586042-0

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:

- [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
- PCB Mounting Orientation = Right Angle
- PCB Mount Alignment = Without
- PCB Mount Retention = Without
- 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]) = 22.20 [0.874]
- 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

Housing Features:

- Connector Style = Plug
- Centerline (mm [in]) = 4.20 [0.165]
- Mating Alignment = With
- Mating Alignment Type = Keyed
- Housing Color = White
- UL Flammability Rating = UL 94V-0

Configuration Features:

- Number of Positions = 10
- 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 = CSA, UL
- 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)

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

- Pick and Place Cover = Without

Packaging Features:

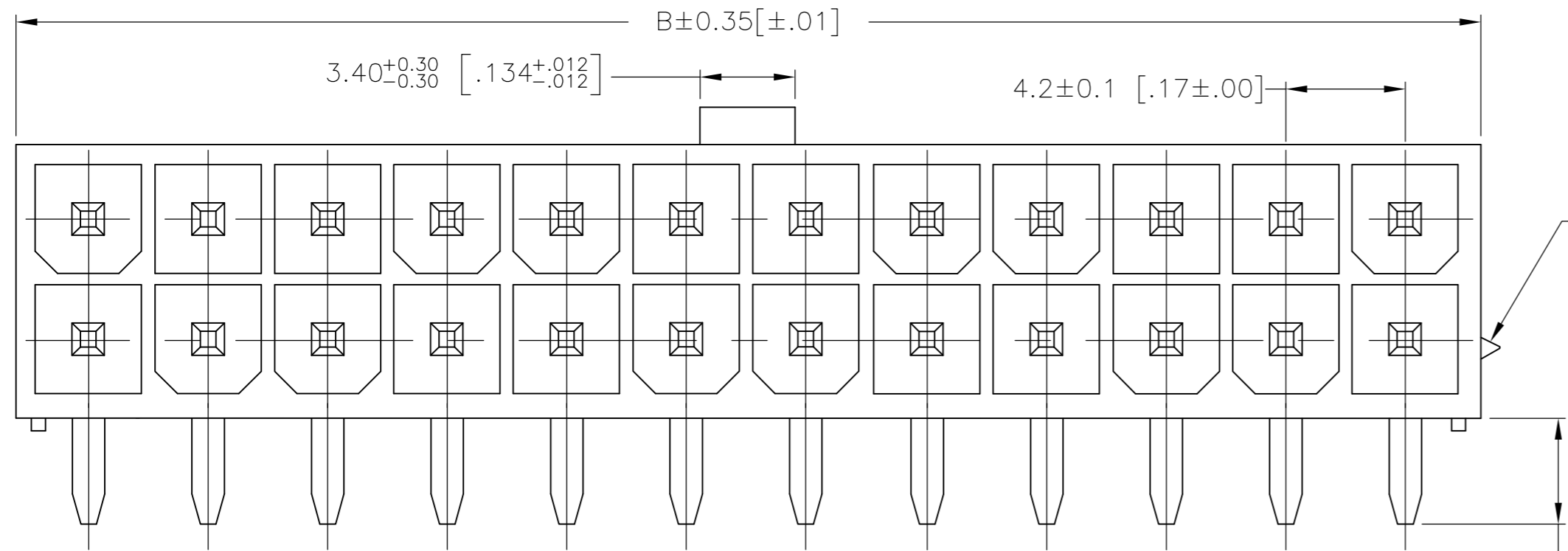
- Packaging Method = Tray

Other:

- Brand = AMP

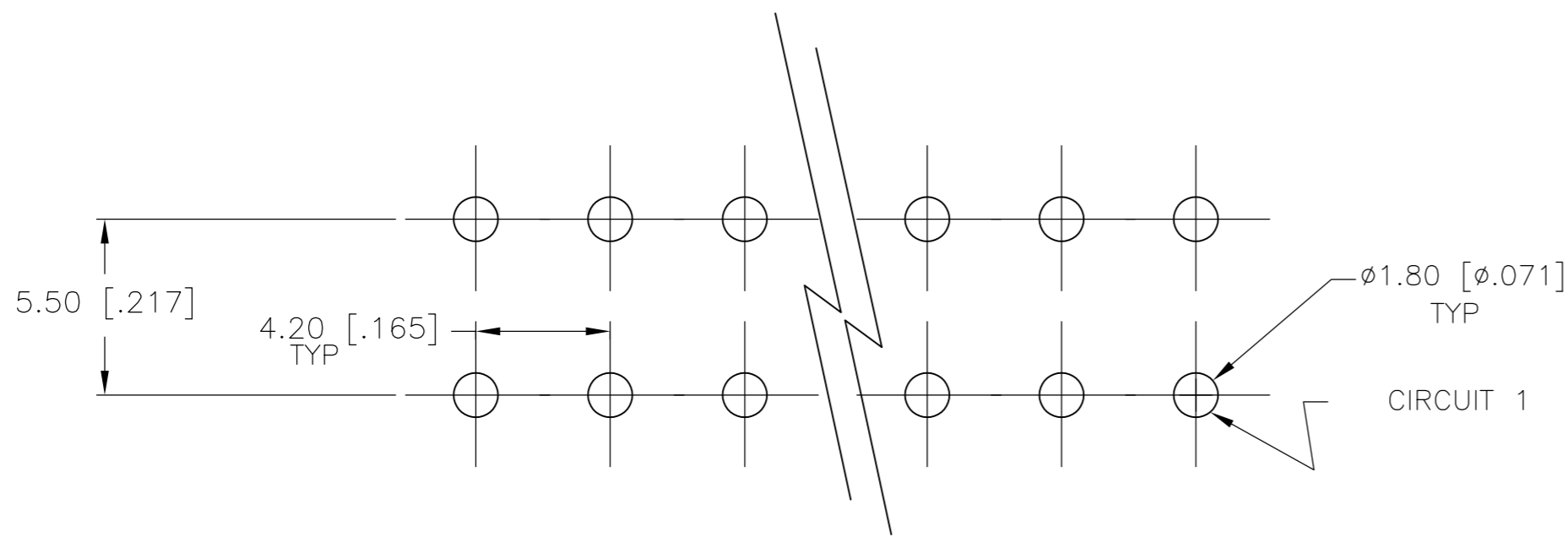
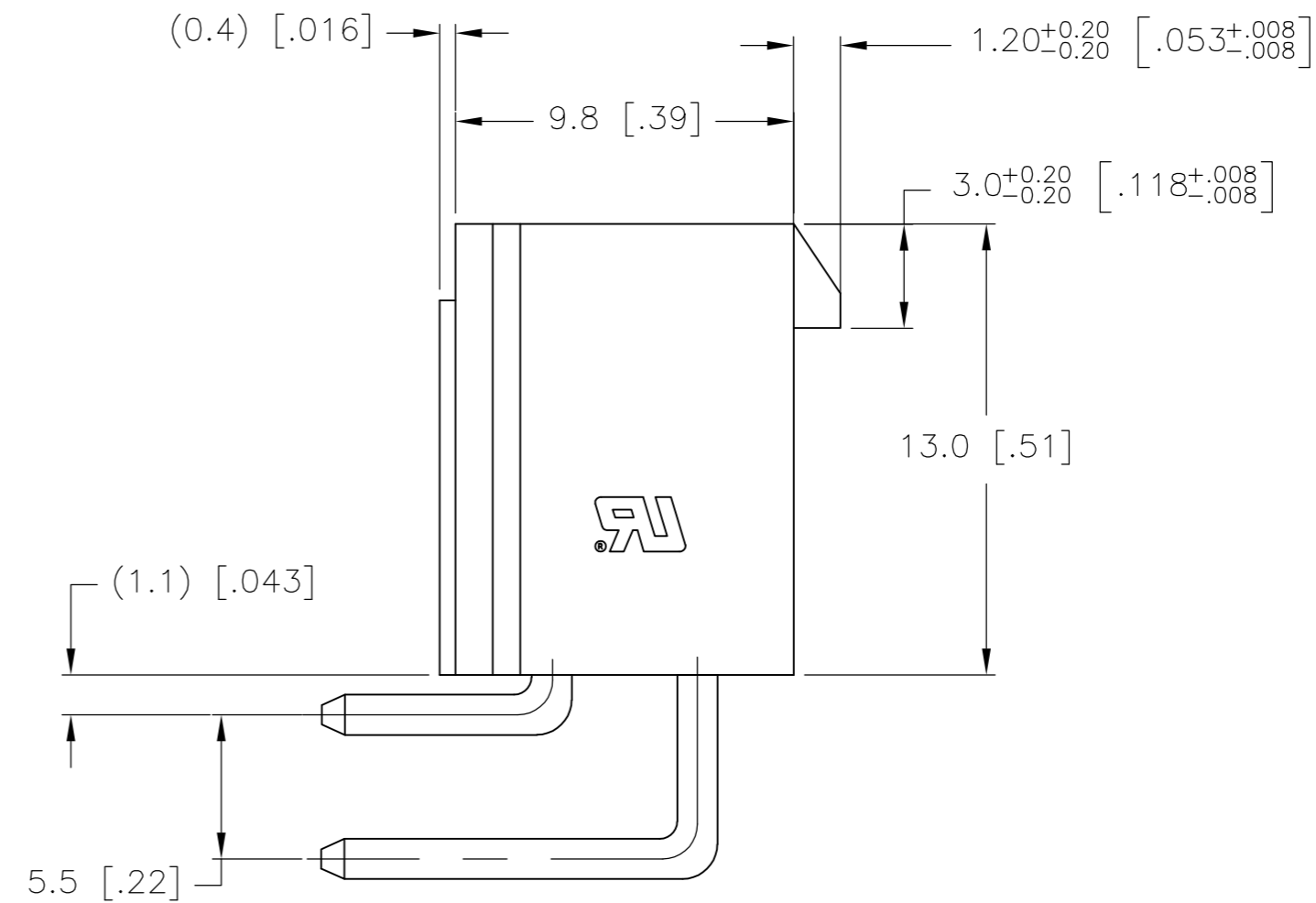
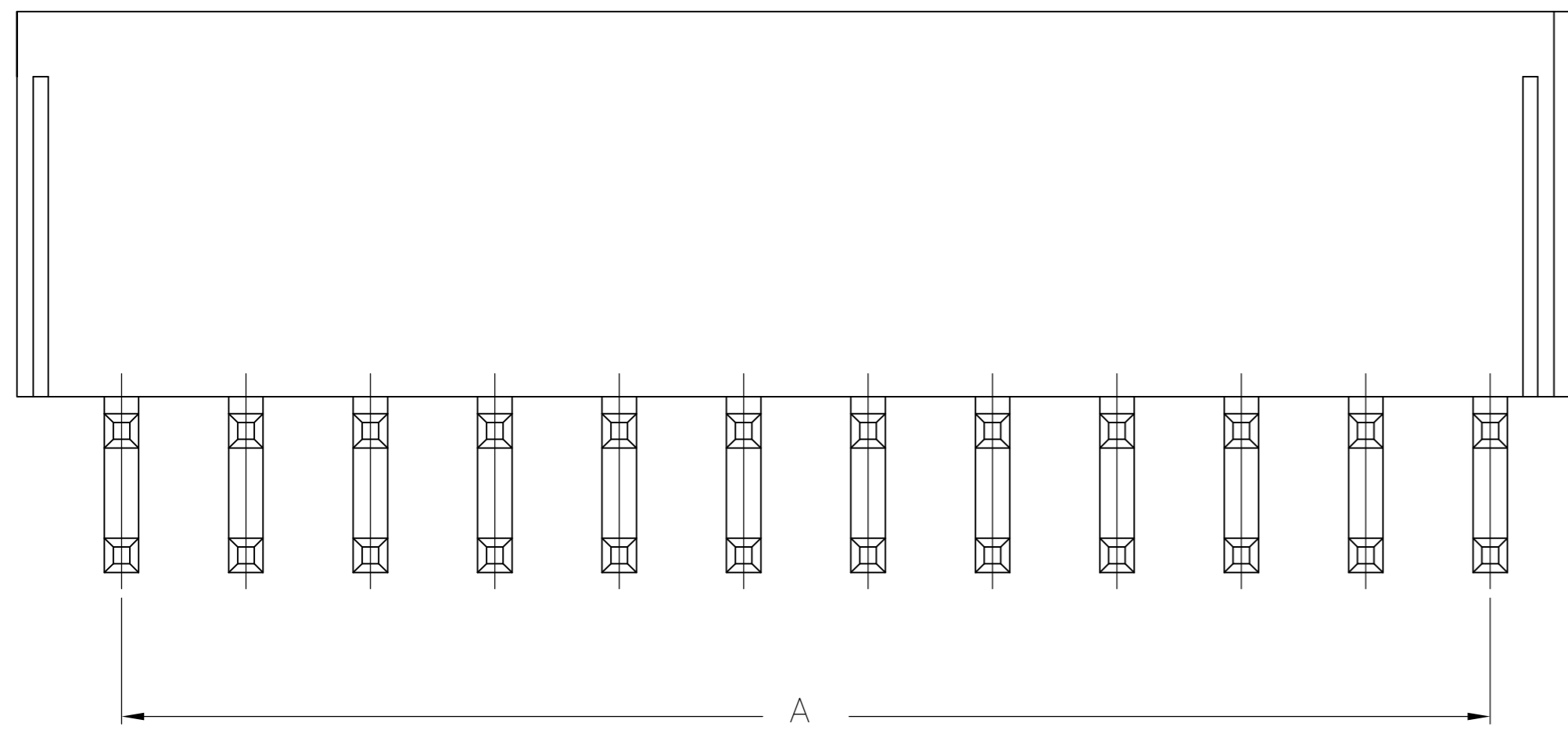
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LOC		DIST		REVISIONS			
P	LTR	DESCRIPTION		DATE	DWN	APVD	
CM	00	B4	REVISED PER ECR-12-021619		17DEC2012	A.Z	F.M



POSITION 1 IDENTIFICATION FEATURE

- 1 MATERIAL: HOUSING-NYLON, UL94V-0 (COLOR-NATURAL, COLOR OF PARTS MAY VARY) CONTACTS-0.25 [0.010] THICK BRASS ALLOY.
- 2 CONTACT FINISH: 0.002032 [0.000080] MIN MATTE TIN OVER 0.000381 [0.000015] MIN NICKEL OVER ENTIRE CONTACT.
- 3 MATES WITH VAL-U-LOK(TM) RECEPTACLE HOUSINGS.



PCB LAYOUT: COMPONENT SIDE
 RECOMMENDED BOARD THICKNESS 1.60 [0.063]

2-1586042-4 SHOWN

POS	A	B ± 0.35 [±.01]	PART NUMBER
2		5.4 [0.21]	1586042-2
4	4.2 ± 0.1 [0.17 ± 0.00]	9.6 [0.38]	1586042-4
6	8.4 ± 0.1 [0.33 ± 0.00]	13.8 [0.54]	1586042-6
8	12.6 ± 0.1 [0.50 ± 0.00]	18.0 [0.71]	1586042-8
10	16.8 ± 0.1 [0.66 ± 0.00]	22.2 [0.87]	1-1586042-0
12	21.0 ± 0.2 [0.83 ± 0.01]	26.4 [1.04]	1-1586042-2
14	25.2 ± 0.2 [0.99 ± 0.01]	30.6 [1.21]	1-1586042-4
16	29.4 ± 0.2 [1.16 ± 0.01]	34.8 [1.37]	1-1586042-6
18	33.6 ± 0.2 [1.32 ± 0.01]	39.0 [1.54]	1-1586042-8
20	37.8 ± 0.2 [1.49 ± 0.01]	43.2 [1.70]	2-1586042-0
22	42.0 ± 0.2 [1.65 ± 0.01]	47.4 [1.87]	2-1586042-2
24	46.2 ± 0.2 [1.82 ± 0.01]	51.6 [2.03]	2-1586042-4

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 [0.02]	3 PLC ± 0.25 [0.010]	APPLICATION SPEC	SIZE A2	CAGE CODE 00779
4 PLC ± 0.150 [0059]	ANGLES ±	WEIGHT	DRAWING NO C=1586042	RESTRICTED TO -
MATERIAL 1	FINISH 2	CUSTOMER DRAWING	SCALE 10:1	SHEET 1 of 1
			REV B4	