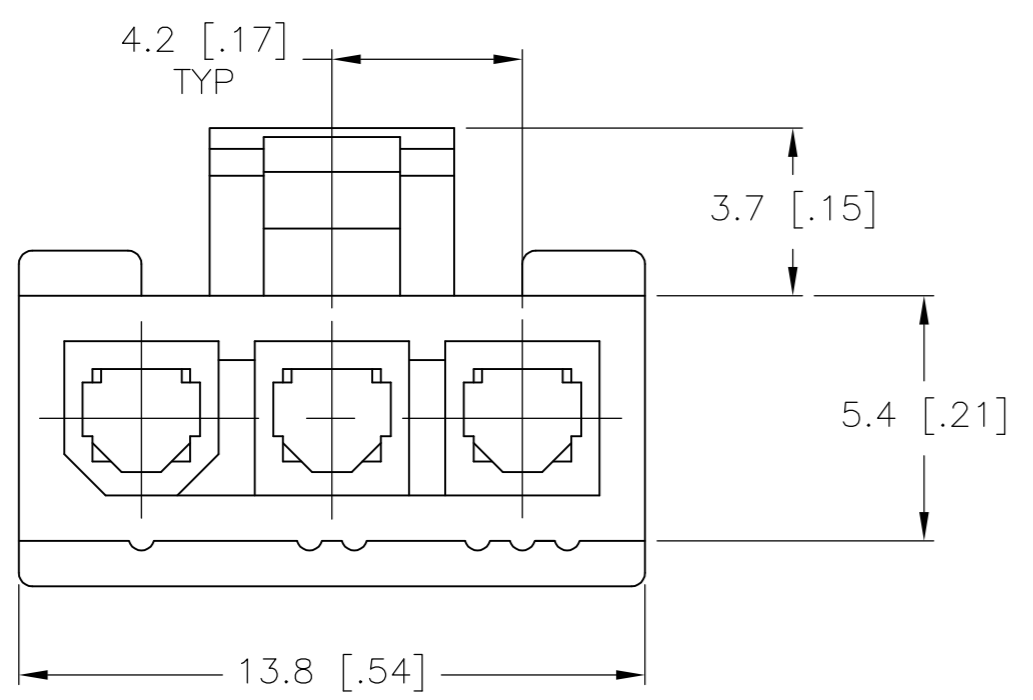
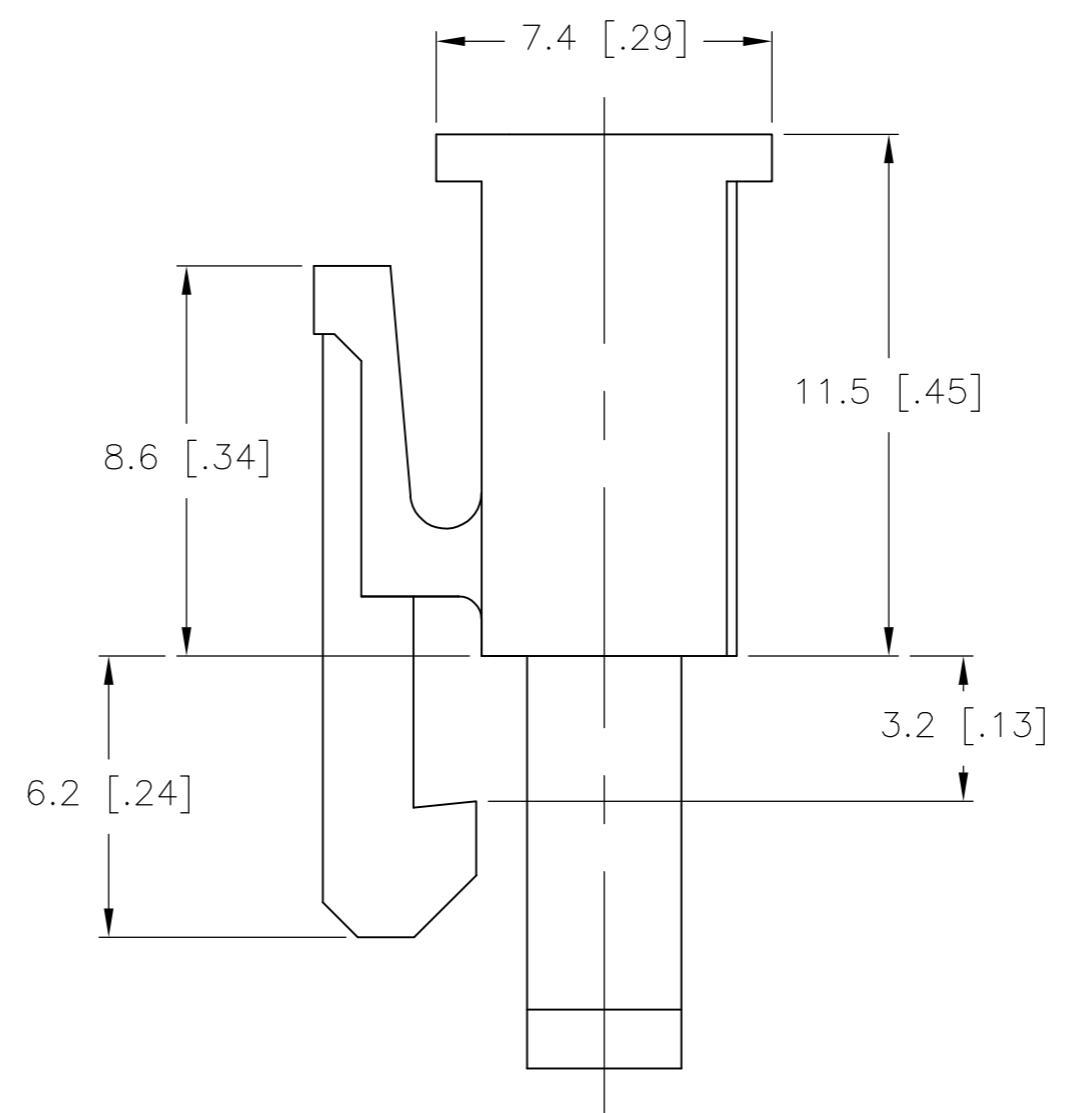
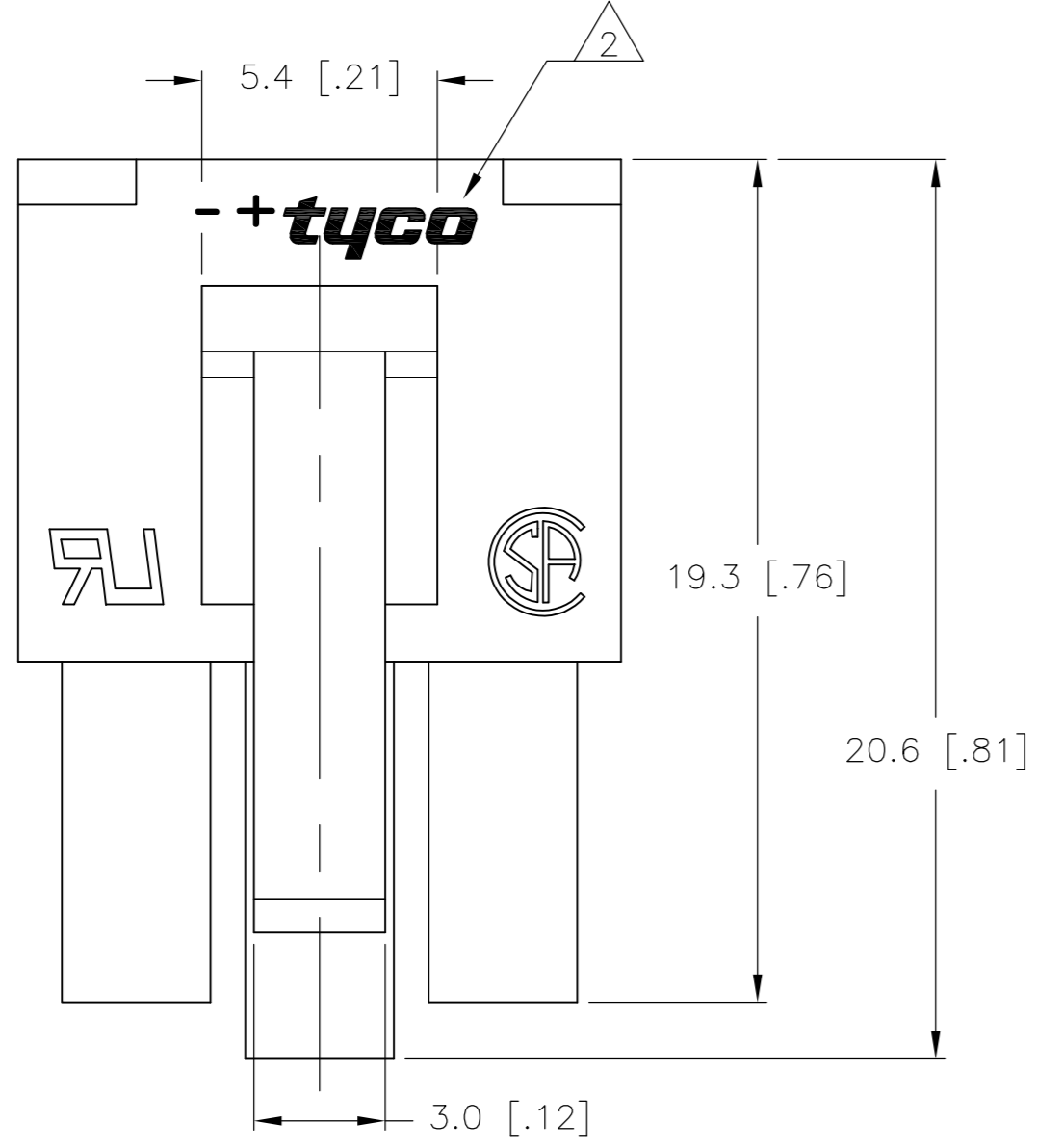
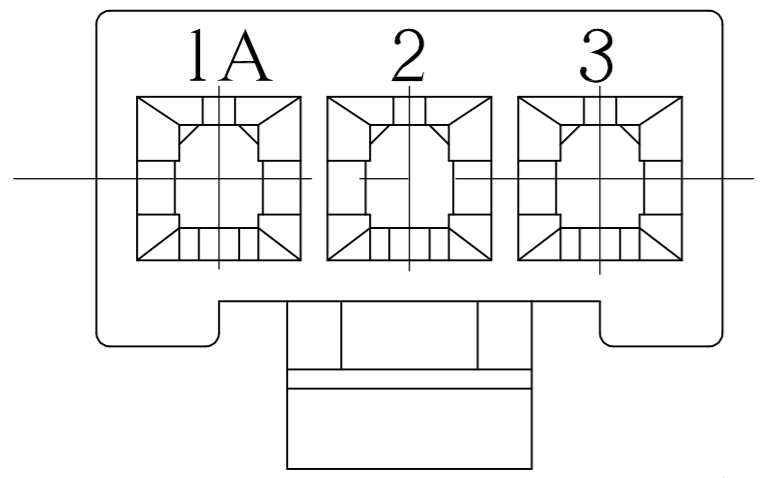


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LOC	DIST	REVISIONS			
P	LTR	DESCRIPTION	DATE	DWN	APVD
CM	00	B	REVISED PER ECO-08-032266	05JAN08	HMR CC

- 1 MATERIAL: NYLON UL94V-2, NATURAL.
- 2 TE LOGO, UL AND CSA LOGO SIZE, LOCATION AND ORIENTATION OPTIONAL.





1586105-3  
 PART NUMBER

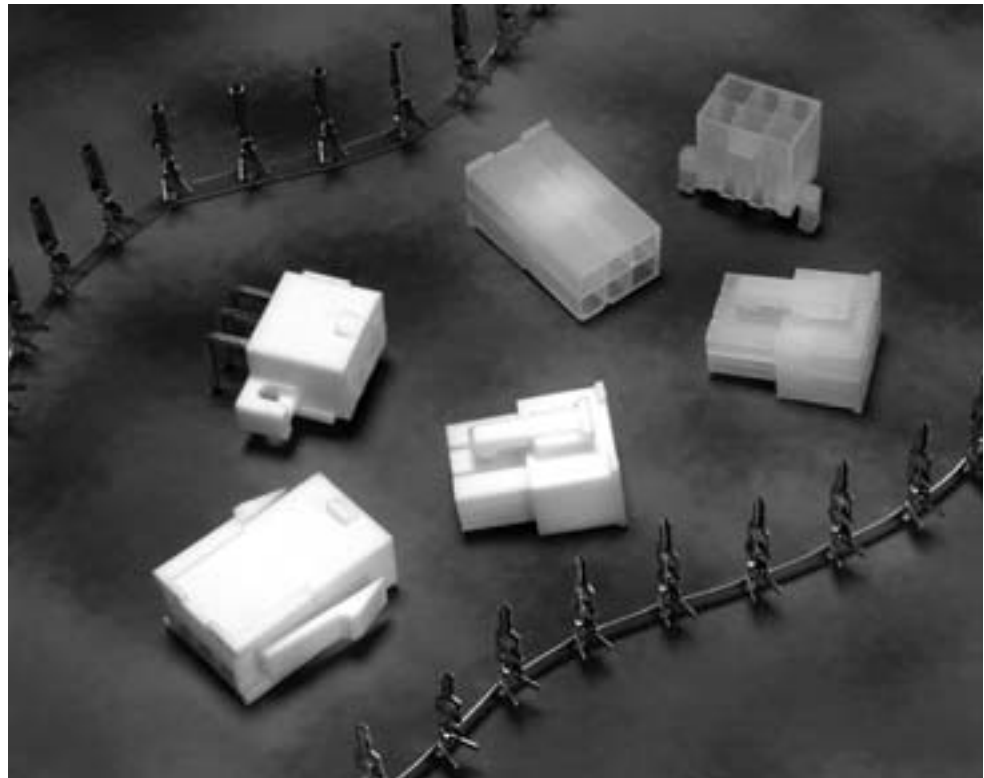
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN S. HOOVER 23-FEB-2004	Tyco Electronics Corporation Harrisburg, PA 17105-3608	
DIMENSIONS: mm [INCHES]		CHK D. COLEY 23-FEB-2004	NAME RECEPTACLE, 3 CIRCUIT, V2 VAL-U-LOK(TM)	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 0.2 [00] 2 PLC ± 3 PLC ± 4 PLC ± ANGLES ± FINISH		APVD D. COLEY 23-FEB-2004	PRODUCT SPEC	
MATERIAL NYLON 66 UL94V-2		APPLICATION SPEC	WEIGHT	RESTRICTED TO
		CUSTOMER DRAWING	SCALE 6:1	SHEET 1 of 1
			SIZE A2	REV B
			CAGE CODE 00779	DRAWING NO C=1586105

1586105

4.2 mm PE Series Connector System (Wire-to-Wire, Wire-to-Board and Wire-to-Panel)

**Product Facts**

- Low cost, wire-to-wire, wire-to-board and wire-to-panel connectors with 4.2 mm centerline
- Easy mate and unmate with positive latch design
- Single-row, 3-5 positions: receptacles, panel mount or free-hanging plugs
- Double-row, 2-24 positions (even only): receptacles, panel mount or free-hanging plugs, and vertical or right-angle pin headers
- Available in UL 94V-2 or UL 94V-0 flammability rated nylon
- Products are lead free to help promote a cleaner environment
- Intermateable and interchangeable with Molex Mini-Fit, Jr. and intermateable AMP-DUAC connectors
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. 208567 
- Certified by Canadian Standards Association, File No. E28476 
- Tyco Electronics Design For Environment (DFE) Standard 230-5



**Performance Characteristics**

**Electrical**

- Voltage**—600 VAC
- Current**—9 amps max. in 2-position applications
- Dielectric Withstanding Voltage**—1500 VAC min.
- Insulation Resistance**—1000 megohms min.

**Mechanical**

- Connector Mating**—1.55 lb. [6.90 N] max. per circuit
- Connector Unmating**—.11 lb. [.49 N] min. per circuit
- Contact Retention**—4.88 lb. [21.71 N] min. per contact
- Durability**—50 cycles, mating and unmating

**Material and Finish**

- Housings**—Nylon, UL 94V-2 and UL 94V-0
- Contacts**—Brass or Phos. Bronze with tin plating (Lead-Free) or gold plating

**Applications**

- Computer motherboards/power supplies
- Harness assemblies used in the Vending, Gaming and Appliance industries
- Car alarm systems
- Heating systems

High Density  
.165 [4.20] Centerline

**Contacts**

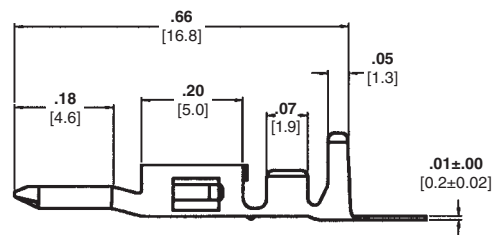
Wire Range (AWG)	Material & Finish	Pin		Socket		Applicator Part Number <sup>1</sup>	PRO-CRIMPER III Hand Tool Part Number
		Strip Form	Loose Piece	Strip Form	Loose Piece		
26-22	Brass, Pre-Tin	794957-1	1586316-1	794958-1	1586317-1	1385448-X	91387-1
	Phos. Brz., Pre-Tin	794957-3	1586316-3	794958-3	1586317-3		
	Brass, Gold	794957-2	1586316-2	794958-2	1586317-2		
	Phos. Brz., Gold	794957-4	1586316-4	794958-4	1586317-4		
22-18	Brass, Pre-Tin	794955-1	1586314-1	794956-1	1586315-1	1385817-X	91388-1
	Phos. Brz., Pre-Tin	794955-3	1586314-3	794956-3	1586315-3		
	Brass, Gold	794955-2	1586314-2	794956-2	1586315-2		
	Phos. Brz., Gold	794955-4	1586314-4	794956-4	1586315-4		

Extraction Tool Part Number 1586343-1

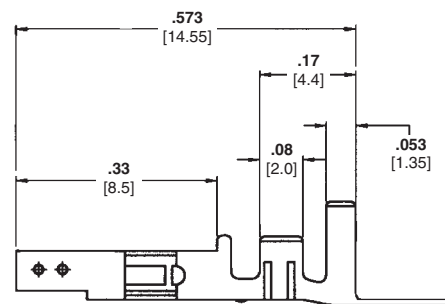
<sup>1</sup> For applicator and machine part numbers, contact Technical Support.

**Note: All part numbers are RoHS Compliant.**

**Pin – (used in Plug Housing)**



**Socket – (used in Receptacle Housing)**



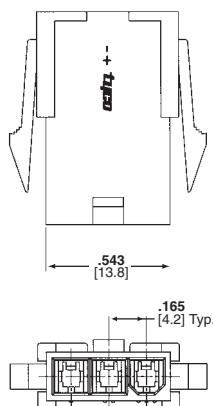
**Housings – Single Row**

No. of Positions	UL 94V-2 Housings			UL 94V-0 Housings		
	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing
3*	1586101-3	1586103-3	1586105-3	1586102-3	1586104-3	1586106-3
4	1586022-4	1586024-4	1586026-4	1586023-4	1586025-4	1586027-4
5	1586022-5	1586024-5	1586026-5	1586023-5	1586025-5	1586027-5

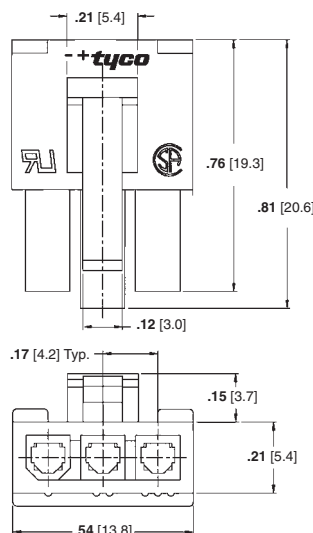
\*Note: 3 position housings are First Mate/Last Break.

**Note: All part numbers are RoHS Compliant.**

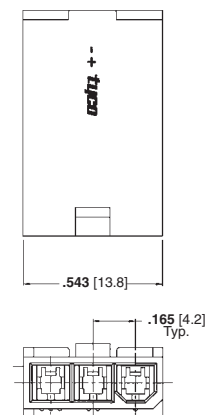
**Panel Mount Plug Housing**



**Receptacle Housing**



**Free-Hanging Plug Housing**



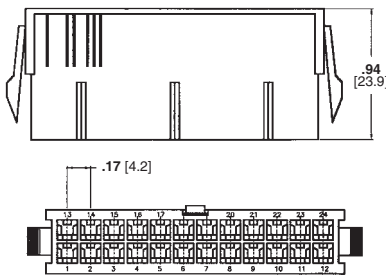
**Housings – Double Row**

No. of Positions	UL 94V-2 Housings			UL 94V-0 Housings		
	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing
2	794953-2	1586000-2	794954-2	1586018-2	1586017-2	1586019-2
4	794953-4	1586000-4	794954-4	1586018-4	1586017-4	1586019-4
6	794953-6	1586000-6	794954-6	1586018-6	1586017-6	1586019-6
8	794953-8	1586000-8	794954-8	1586018-8	1586017-8	1586019-8
10	1-794953-0	1-1586000-0	1-794954-0	1-1586018-0	1-1586017-0	1-1586019-0
12	1-794953-2	1-1586000-2	1-794954-2	1-1586018-2	1-1586017-2	1-1586019-2
14	1-794953-4	1-1586000-4	1-794954-4	1-1586018-4	1-1586017-4	1-1586019-4
16	1-794953-6	1-1586000-6	1-794954-6	1-1586018-6	1-1586017-6	1-1586019-6
18	1-794953-8	1-1586000-8	1-794954-8	1-1586018-8	1-1586017-8	1-1586019-8
20	2-794953-0	2-1586000-0	2-794954-0	2-1586018-0	2-1586017-0	2-1586019-0
22	2-794953-2	2-1586000-2	2-794954-2	2-1586018-2	2-1586017-2	2-1586019-2
24	2-794953-4	2-1586000-4	2-794954-4	2-1586018-4	2-1586017-4	2-1586019-4

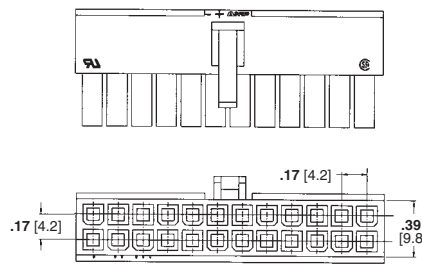
Note: Plug housings accept pin contacts and receptacle housings accept socket contacts on page 114.

Note: All part numbers are RoHS Compliant.

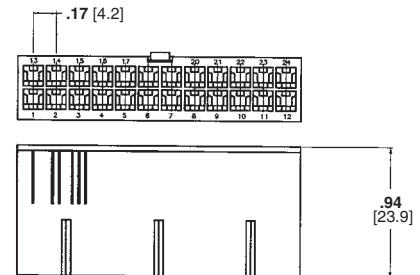
**Panel Mount Plug Housing**



**Receptacle Housing**



**Free-Hanging Plug Housing**



High Density  
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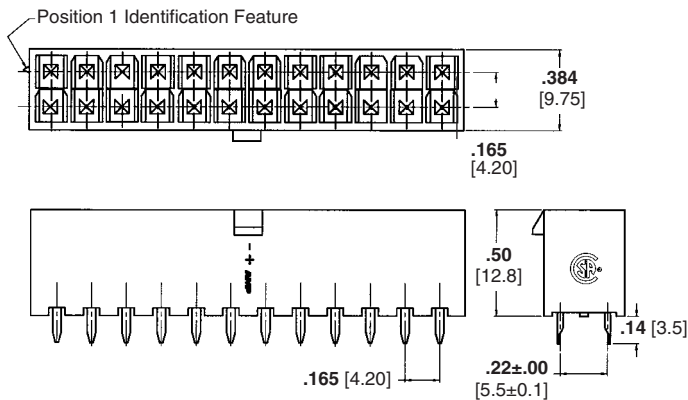
**Pin Headers**

No. of Positions	UL 94V-2 Pin Headers				UL 94V-0 Pin Headers			
	Vertical		Right-Angle		Vertical		Right-Angle	
	w/o Pegs	w/Pegs	w/o Pegs	Screw Mount	w/o Pegs	w/Pegs	w/o Pegs	Screw Mount
2	1586037-2	1586039-2	1586041-2	1586043-2	1586038-2	1586040-2	1586042-2	1586044-2
4	1586037-4	1586039-4	1586041-4	1586043-4	1586038-4	1586040-4	1586042-4	1586044-4
6	1586037-6	1586039-6	1586041-6	1586043-6	1586038-6	1586040-6	1586042-6	1586044-6
8	1586037-8	1586039-8	1586041-8	1586043-8	1586038-8	1586040-8	1586042-8	1586044-8
10	1-1586037-0	1-1586039-0	1-1586041-0	1-1586043-0	1-1586038-0	1-1586040-0	1-1586042-0	1-1586044-0
12	1-1586037-2	1-1586039-2	1-1586041-2	1-1586043-2	1-1586038-2	1-1586040-2	1-1586042-2	1-1586044-2
14	1-1586037-4	1-1586039-4	1-1586041-4	1-1586043-4	1-1586038-4	1-1586040-4	1-1586042-4	1-1586044-4
16	1-1586037-6	1-1586039-6	1-1586041-6	1-1586043-6	1-1586038-6	1-1586040-6	1-1586042-6	1-1586044-6
18	1-1586037-8	1-1586039-8	1-1586041-8	1-1586043-8	1-1586038-8	1-1586040-8	1-1586042-8	1-1586044-8
20	2-1586037-0	2-1586039-0	2-1586041-0	2-1586043-0	2-1586038-0	2-1586040-0	2-1586042-0	2-1586044-0
22	2-1586037-2	2-1586039-2	2-1586041-2	2-1586043-2	2-1586038-2	2-1586040-2	2-1586042-2	2-1586044-2
24	2-1586037-4	2-1586039-4	2-1586041-4	2-1586043-4	2-1586038-4	2-1586040-4	2-1586042-4	2-1586044-4

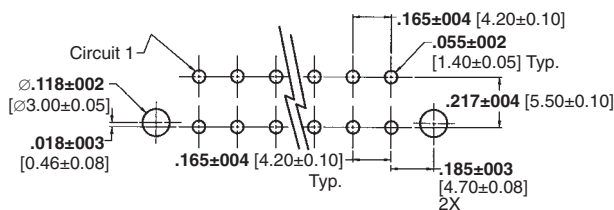
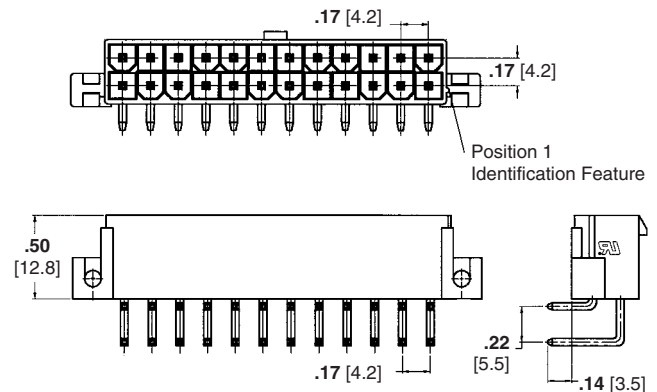
**Note:** All Headers have Brass, Tin-Plated contacts.

**Note:** All part numbers are RoHS Compliant.

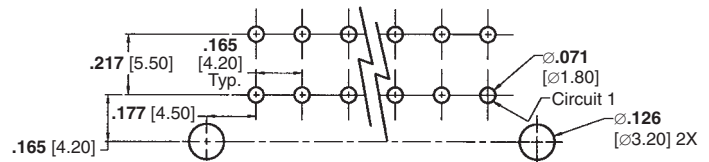
**Vertical Pin Headers (Part No. 1586037 shown w/o pegs)**



**Right-Angle Pin Headers (Part No. 1586043 Screw Mount)**



**PCB Layout: Component Side (shown with pegs)**  
Recommended Board Thickness .070 [1.78]

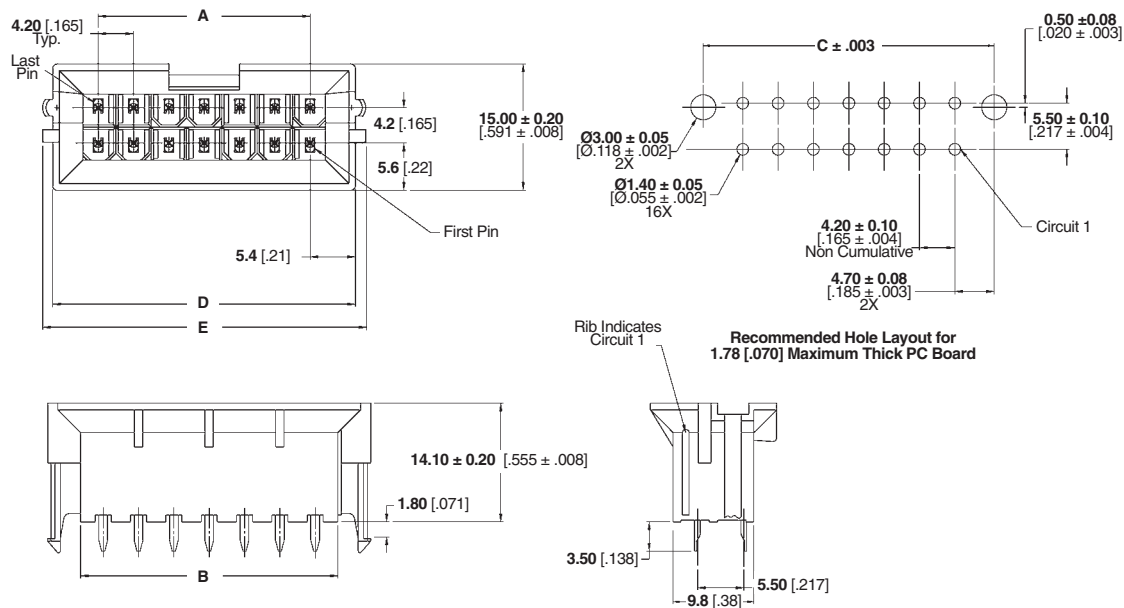


**PCB Layout: Component Side (screw mount shown)**  
Recommended Board Thickness .063 [1.60]

**Blindmate Headers**

No. of Pos.	Dimensions					UL 94V-2 Housings		UL 94V-0 Housings	
	A	B	C	D	E	With Drain Holes	Without Drain Holes	With Drain Holes	Without Drain Holes
2	—	5.4 [0.21]	9.4 [0.37]	10.8 [0.43]	13.2 [0.52]	1586585-2	1586586-2	1586587-2	1586588-2
4	4.2 [0.17]	9.6 [0.38]	13.6 [0.54]	15.0 [0.59]	17.4 [0.69]	1586585-4	1586586-4	1586587-4	1586588-4
6	8.4 [0.33]	13.8 [0.54]	17.8 [0.70]	19.2 [0.76]	21.6 [0.85]	1586585-6	1586586-6	1586587-6	1586588-6
8	12.6 [0.50]	18.0 [0.71]	22.0 [0.87]	23.4 [0.92]	25.8 [1.02]	1586585-8	1586586-8	1586587-8	1586588-8
10	16.8 [0.66]	22.2 [0.87]	26.2 [1.03]	27.6 [1.09]	30.0 [1.18]	1-1586585-0	1-1586586-0	1-1586587-0	1-1586588-0
12	21.0 [0.83]	26.4 [1.04]	30.4 [1.20]	31.8 [1.25]	34.2 [1.35]	1-1586585-2	1-1586586-2	1-1586587-2	1-1586588-2
14	25.2 [0.99]	30.6 [1.20]	34.6 [1.36]	36.0 [1.42]	38.4 [1.51]	1-1586585-4	1-1586586-4	1-1586587-4	1-1586588-4
16	29.4 [1.58]	34.8 [1.37]	38.8 [1.53]	40.2 [1.58]	42.6 [1.69]	1-1586585-6	1-1586586-6	1-1586587-6	1-1586588-6
18	33.6 [1.32]	39.0 [1.54]	43.0 [1.69]	44.4 [1.75]	46.8 [1.84]	1-1586585-8	1-1586586-8	1-1586587-8	1-1586588-8
20	37.8 [1.49]	43.2 [1.70]	47.2 [1.86]	48.6 [1.91]	51.0 [2.01]	2-1586585-0	2-1586586-0	2-1586587-0	2-1586588-0
22	42.0 [1.65]	47.4 [1.87]	51.4 [2.02]	52.0 [2.08]	55.2 [2.17]	2-1586585-2	2-1586586-2	2-1586587-2	2-1586588-2
24	46.2 [1.82]	51.6 [2.03]	55.6 [2.19]	57.0 [2.24]	59.4 [2.32]	2-1586585-4	2-1586586-4	2-1586587-4	2-1586588-4

Note: All part numbers are RoHS Compliant.



High Density  
.165 [4.20] Centerline

**Engineering Notes**

