

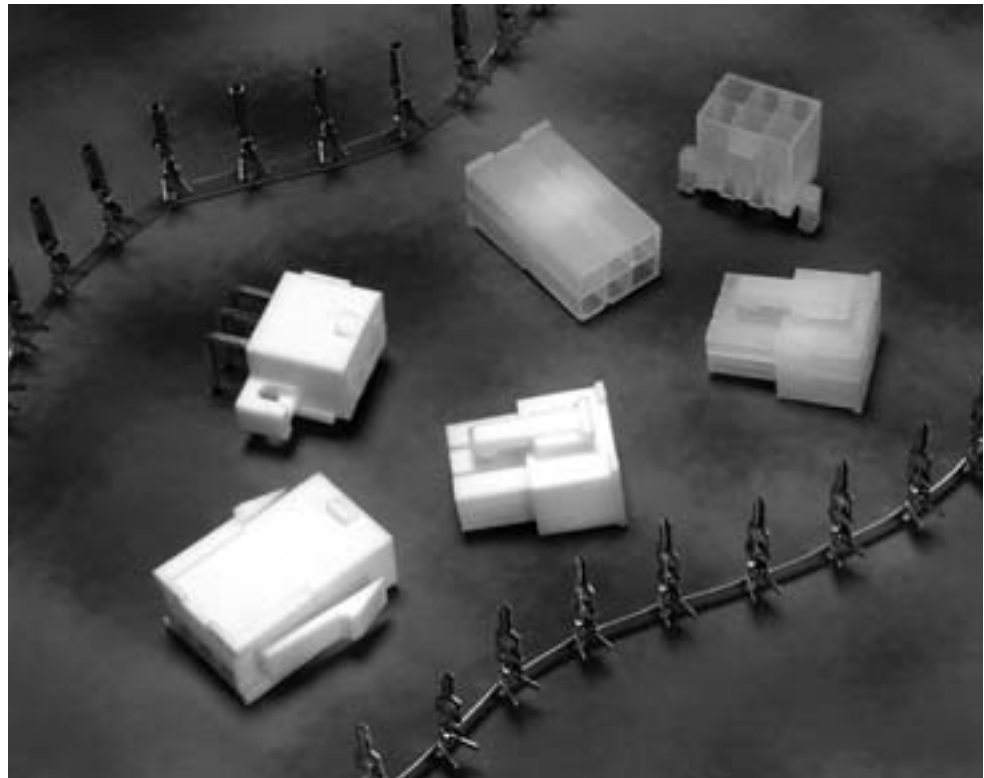


4.2 mm PE Series Connector System (Wire-to-Wire, Wire-to-Board and Wire-to-Panel)

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

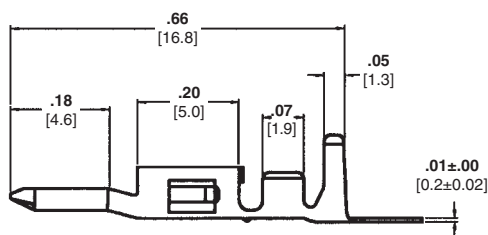
| Wire Range (AWG) | Material & Finish | Pin | | Socket | | Applicator Part Number ¹ | PRO-CRIMPER III Hand Tool Part Number |
|------------------|---------------------|------------|-------------|------------|-------------|-------------------------------------|---------------------------------------|
| | | 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

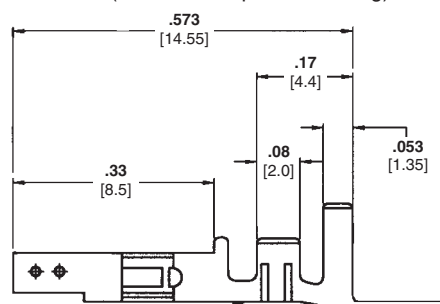
¹ For applicator and machine part numbers, contact Technical Support.

Note: All part numbers are RoHS Compliant.

Pin – (used in Plug Housing)



Socket – (used in Receptacle Housing)



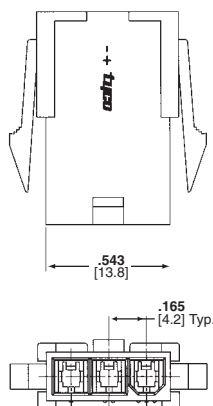
Housings – Single Row

| 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 |

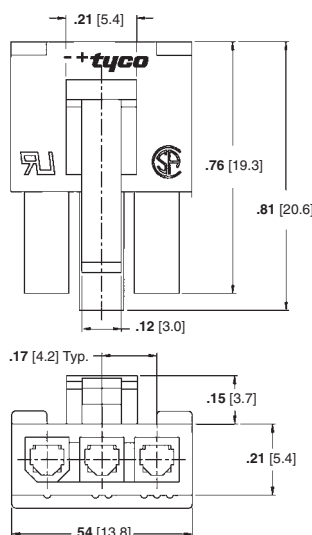
*Note: 3 position housings are First Mate/Last Break.

Note: All part numbers are RoHS Compliant.

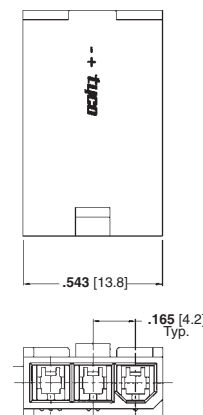
Panel Mount Plug Housing



Receptacle Housing



Free-Hanging Plug Housing



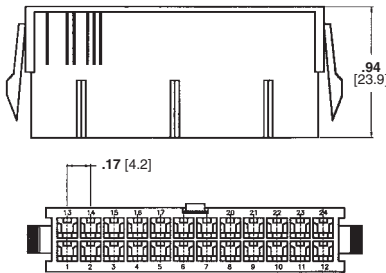
Housings – Double Row

| 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 |

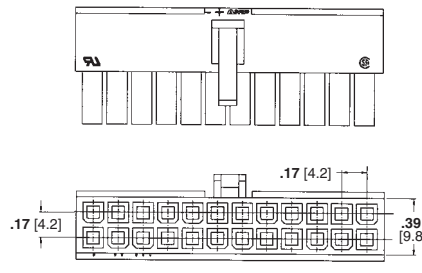
Note: Plug housings accept pin contacts and receptacle housings accept socket contacts on page 114.

Note: All part numbers are RoHS Compliant.

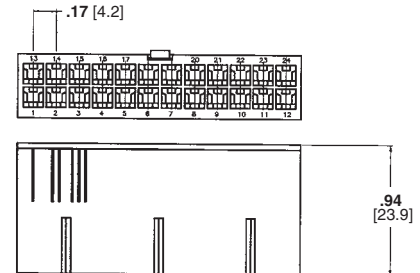
Panel Mount Plug Housing



Receptacle Housing



Free-Hanging Plug Housing



High Density
.165 [4.20] Centerline

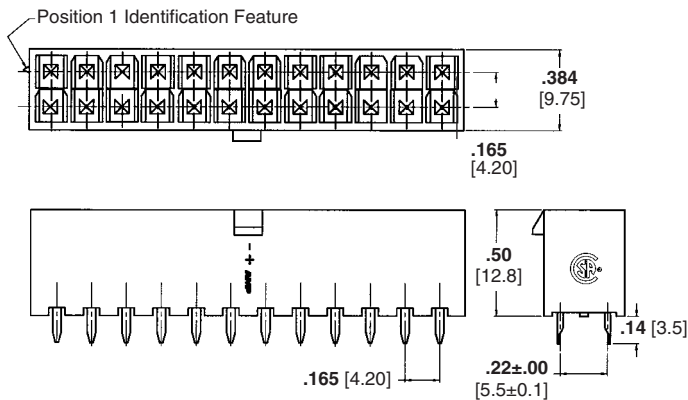
Pin Headers

| 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 |

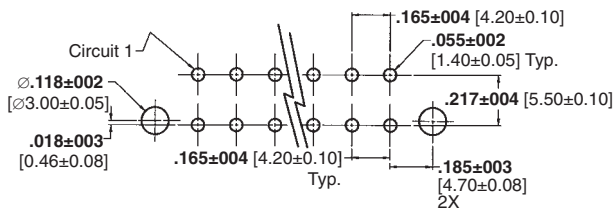
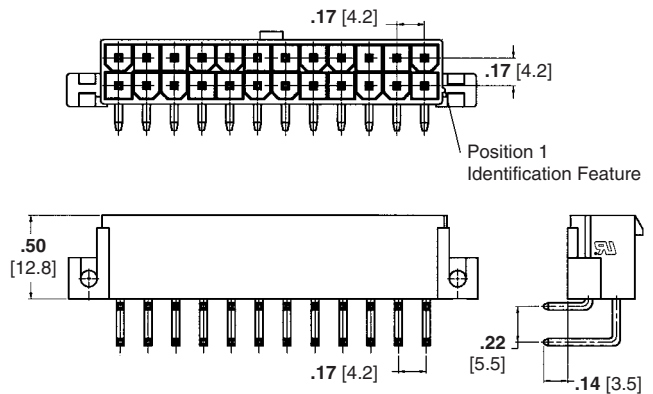
Note: All Headers have Brass, Tin-Plated contacts.

Note: All part numbers are RoHS Compliant.

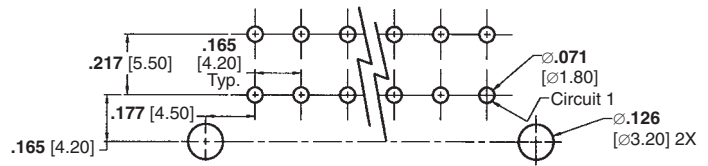
Vertical Pin Headers (Part No. 1586037 shown w/o pegs)



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



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

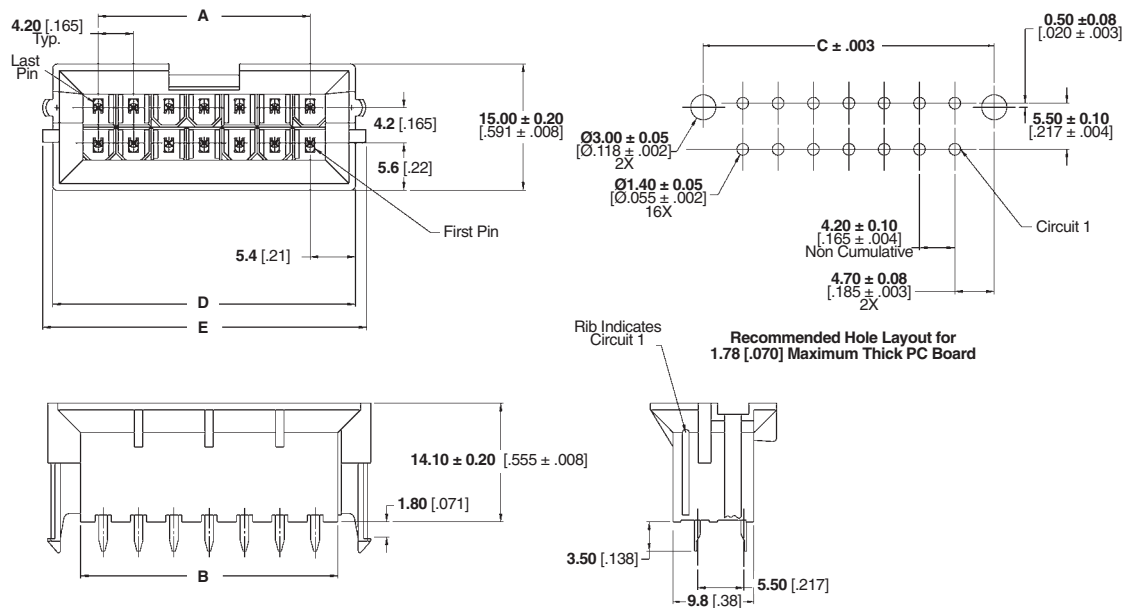


PCB Layout: Component Side (screw mount shown)
Recommended Board Thickness .063 [1.60]

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.



Engineering Notes

