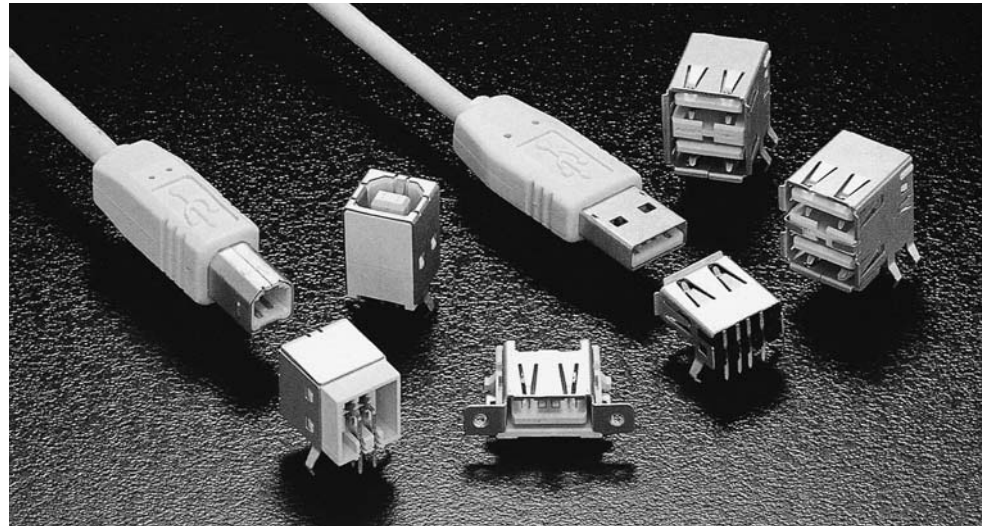


**Product Facts**

- Plug and Play capability
- Hot pluggable, permits attaching or detaching peripherals without power down or reboot
- Single 4-position connector, polarized for proper orientation
- Complete family of board-mount receptacles, including right-angle, thru-hole, thru-hole type B, side-by-side, and stacked
- Cable mount overmold plug kits for both standard and type B applications
- Consolidates serial parallel, keyboard, mouse and game ports
- Compatible with asynchronous and isochronous data transfer methods



The Tyco Electronics Connector System will accommodate the two differentially driven data wires that provide bi-directional, simultaneous signals for full speed 12Mbps or for low speed 1.5Mbps used in Universal Series Bus (USB) Systems. The Tyco Electronics USB System is a complete inter-

connection technology for I/O devices, including: key-boards, mice, game port, serial port devices, digital audio, printers, scanners, modems, joy sticks, and other telecommunication devices. Designed for outside-of-box, user friendly applications, the Tyco Electronics system

consists of a single 4-position boardmount receptacle and mating cable mount overmolded plug. Boardmount receptacles are available in standard, Type B, stacked and side-by-side configurations, adding to the system's versatility to meet all USB applications.

**Table of Contents**

**Standard USB**

Series A Receptacle Assemblies ..... 2-10

Series B Receptacle Assemblies ..... 11-12

Cable Assemblies..... 13

**Mini USB**

Connectors ..... 14-16

Plugs ..... 17

Cable Assembly ..... 18

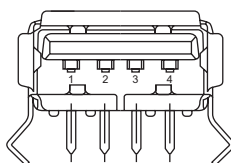
**RJ45 Over USB** ..... 19

**MAG45 Modular Jacks with Integrated Magnetics** ..... 20

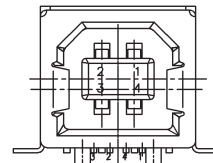
**USB/IEEE Combo** ..... 21

**Part Matrix**

Product	Series	Part Number	RoHS Compliant	Orientation	SMT/ Thru-Hole	Page Number
Header	A	787616-1	202303-1	Right-Angle	Thru-Hole	2
		440260-1	292336-1	Right-Angle	Thru-Hole	2
Header	A	353929-1	5353929-1	Panel Mount, RA	SMT	3
		353928-1	1734038-1	Panel Mount, RA	SMT	4
Header	A	787617-1	5787617-1	Double Stack, RA	Thru-Hole	5
Header	A	440448-1	1-1734181-2	Triple Stack, RA	Thru-Hole	6
Header	A	1470007-2	1-1734383-2	Quad Stack, RA	Thru-Hole	7
Header	A	1364428-1	1734366-1	Vertical	Thru-Hole	8
		1470697-1	1734080-1	Edge Mount	SMT	9
Plug	A	1470695-1	1734028-1	Edge Mount	SMT	9
		Plug Kit	A	1364978-1	1734372-1	Cable Appl.
Header	B	787780-1	292304-1	Right-Angle	Thru-Hole	11
Header	B	787834-1	5787834-1	Vertical	Thru-Hole	11
Header	B	1734346-1	1734346	Right-Angle	SMT	12
Plug Shell	B	796007-2	796007-3	Cable Appl.		12
Plug Housing	B	796006-4	5796006-4	Cable Appl.		12



**Series A**



**Series B**

©2006 by Tyco Electronics Corporation. All Rights Reserved.  
 AMP, MAG45 and Tyco are trademarks.  
 Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

**Series A Receptacle Assemblies**

**Right-Angle, Thru-Hole**

**Part Number**  
**202303-1**  
 Loose Piece

**Performance Data**

**USB Connector System**

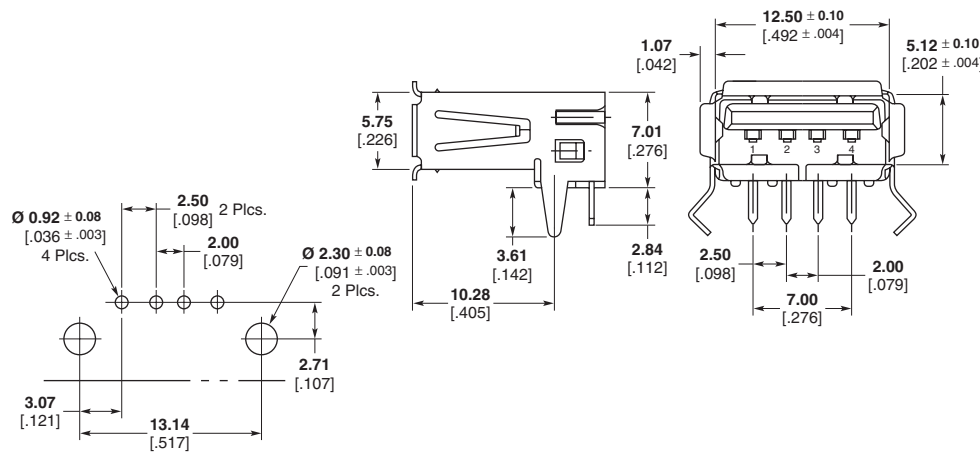
- Voltage Rating** — 30VAC (rms)
- Current Rating** — Signal application only, 1 amp per contact
- Temperature Rating** — -55 to 85°C (unless limited by cable or overmold)
- Termination Resistance** — 30mΩ, max.
- Insulation Resistance** — 1,000 MΩ, min.
- Dielectric Withstanding Voltage** — 750VAC
- Capacitance** — 2pF max.
- Durability** — 1,500 cycles
- Mating Force** — 35N per contact, max.
- Unmating Force** — 10N per contact, max.

**Universal Series Bus**

- Speed** — 12 Mb/s
- Max. No. of Peripherals** — 63
- Max. Distance** — 5m max.
- Data Transfer** — Asynchronous

**Solder Tail Length** — 2.84 [.112]  
**Recommended PCB Thickness** — 1.57 [.062]

**Product Specification**  
**108-1586**



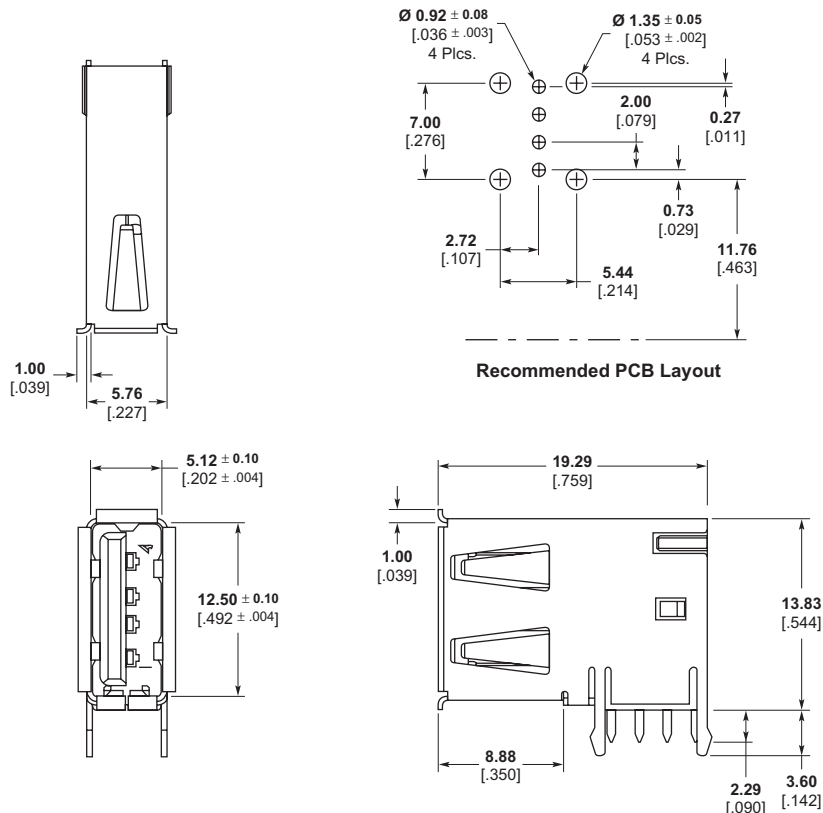
**Recommended PCB Layout**

**Right-Angle, Thru-Hole, Flag**

**Part Number**  
**292336-1**  
 Loose Piece

**Solder Tail Length** — 2.29 [.090]  
**Recommended PCB Thickness** — 1.57 [.062]

**Product Specification**  
**108-1586**



**Recommended PCB Layout**

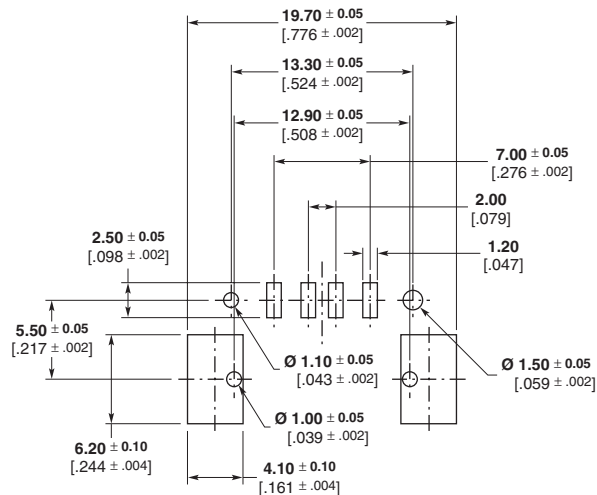
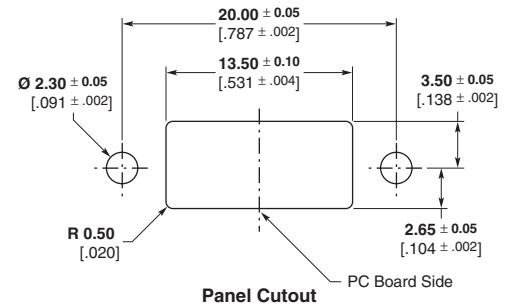
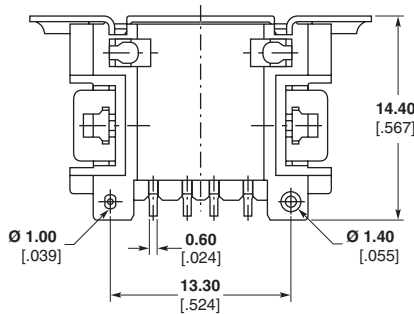
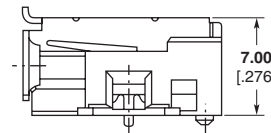
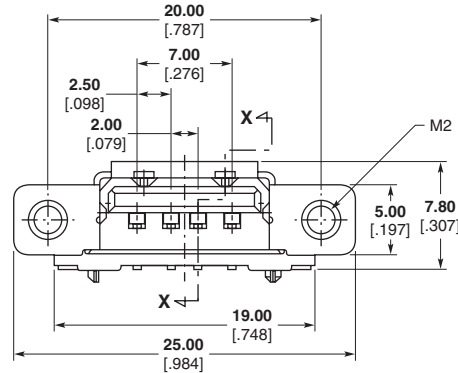
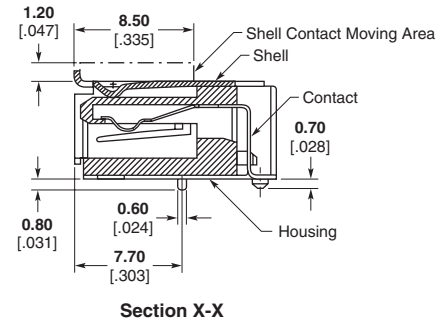
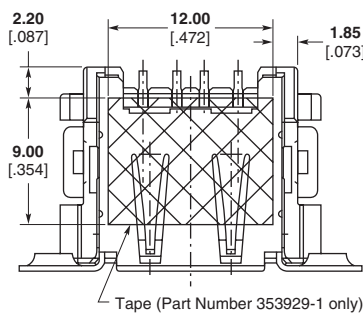
**Series A Receptacle Assemblies** (Continued)

**Panel Mount Right Angle SMT Type**

**Part Number**  
**5353929-1**  
 Emboss Tape Mounted, ea. 350  
**Tape Width** — 44.00 [1.732]

**Part Number**  
**353583-1**  
 Tray Pack, ea. 55

**Product Specification**  
**108-5563**



**Recommended PCB Layout**  
**(Component Side)**

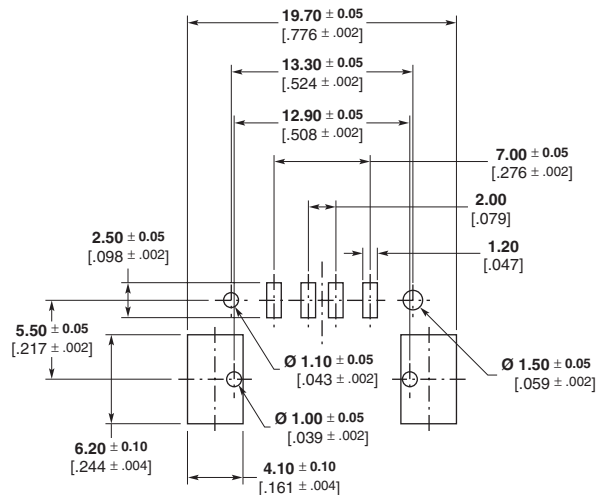
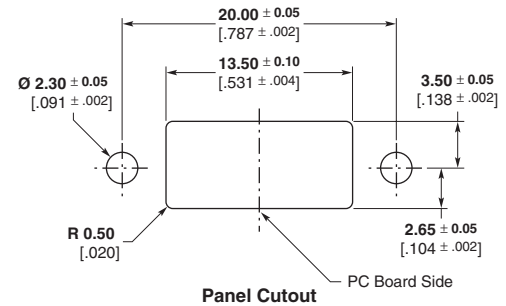
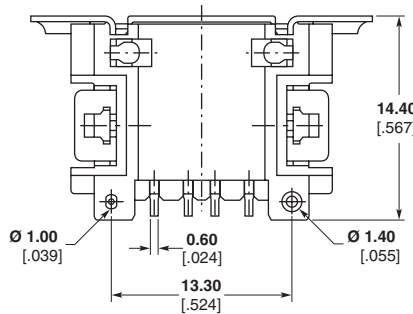
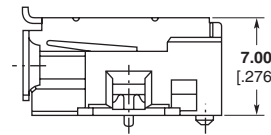
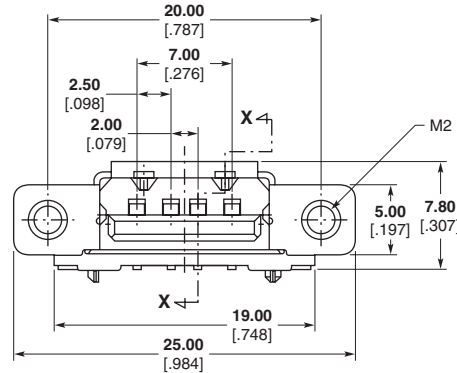
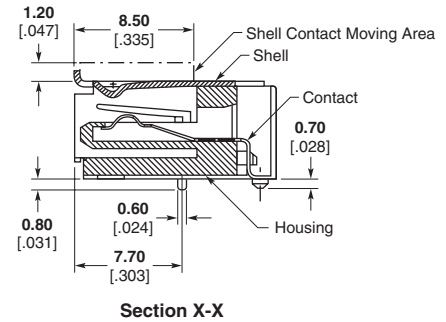
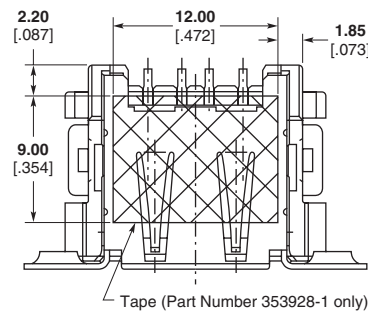
**Series A Receptacle Assemblies** (Continued)

**Panel Mount Right Angle SMT Type, Reverse Mating**

**Part Number**  
**1734038**  
 Emboss Tape Mounted, ea. 350  
**Tape Width** — 44.00 [1.732]

**Part Number**  
**353576-1**  
 Tray Pack, ea. 55

**Product Specification**  
**108-5563**



**Recommended PCB Layout (Component Side)**

**Series A Receptacle Assemblies** (Continued)

**Right Angle Stacked, Thru-Hole**

**Part Number**  
5787617-1

Loose Piece

**Solder Tail Length** — 2.84 [.112]

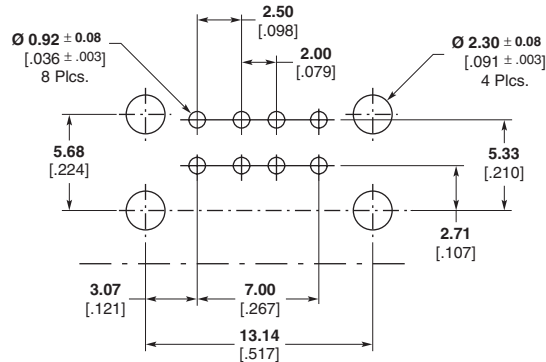
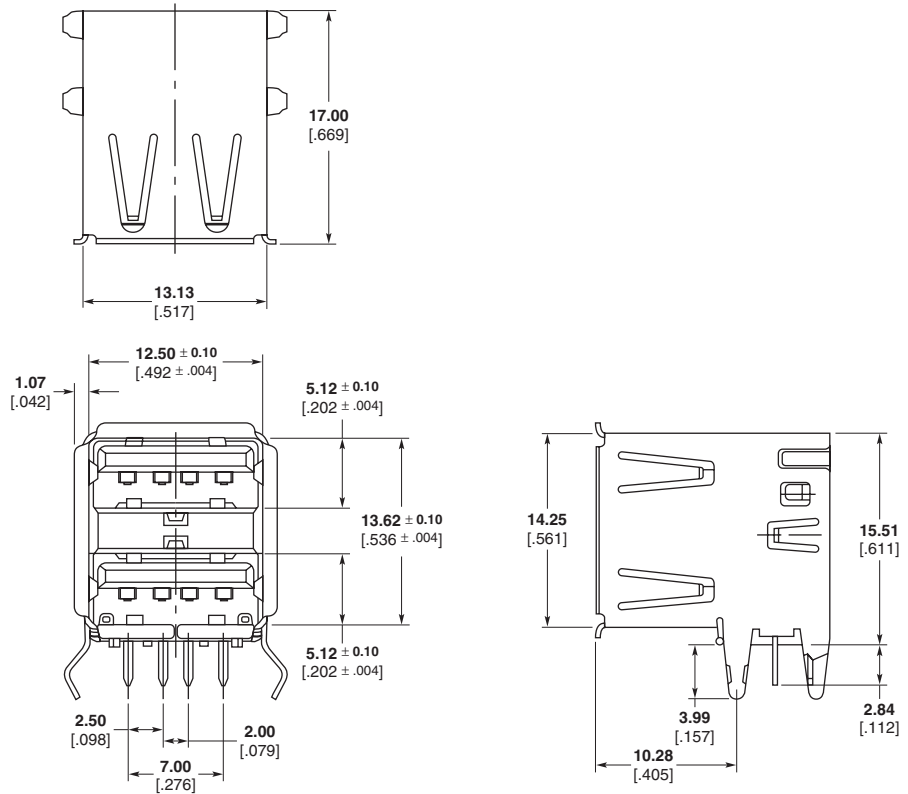
**Recommended PCB Thickness** — 1.57 [.062]

**Material and Finish**

**Housing** — Thermoplastic, UL94V-0

**Shell** — Copper alloy, plated bright tin

**Contacts** — Copper alloy, plated 0.076µm min. gold over 0.76µm min. palladium-nickel on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating or 0.076µm min. Gold on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating.



**Series A Receptacle Assemblies** (Continued)

**Right-Angle, Triple Stack Thru-Hole with Panel Grounds**

**Part Number**  
1-1734181-2

**Material and Finish**

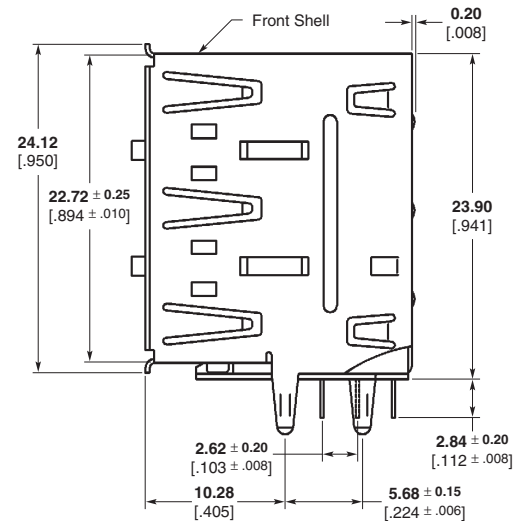
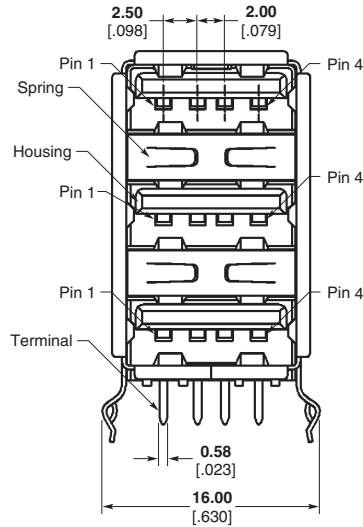
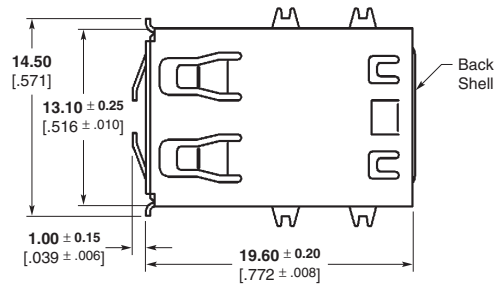
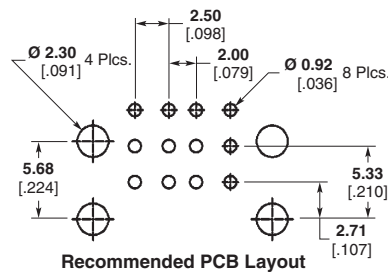
**Housing** — Thermoplastic, UL94V-0, white

**Contact** — Phosphor bronze, plated gold on contact area and tin on solder-tails, nickel underplated

**Front Shell** — Brass, nickel plated, copper underplated

**Back Shell** — SPCC, nickel plated, copper underplated

**Product Specification**  
108-57113



**Series A Receptacle Assemblies** (Continued)

**Right Angle, Quad Stack, Thru-Hole with Panel Grounds**

**Part Number**  
1-1734383-2

**Material and Finish**

**Housing (1)** — Thermoplastic with 30% G/F, UL94V-0, color black

**Housing (2)** — High temperature thermoplastic with 30% G/F, UL94V-0, color black

**Contact** — Phosphor bronze, gold plated in contact area, tin on solder tails, nickel underplated overall

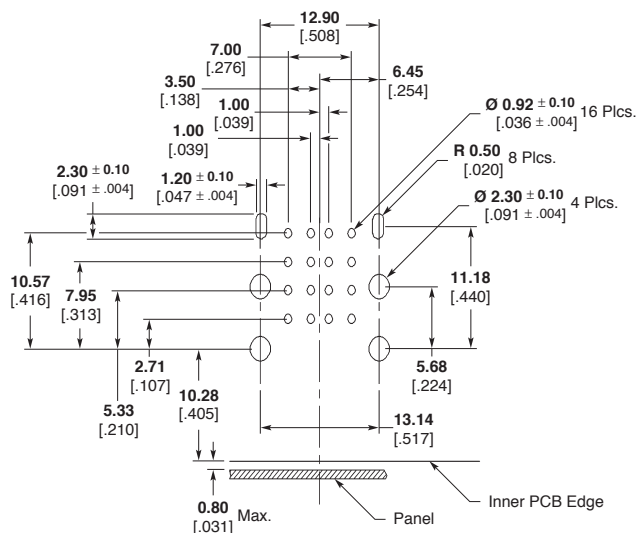
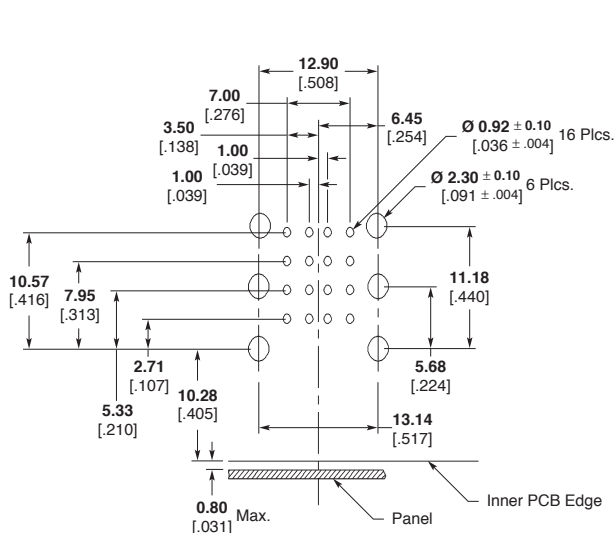
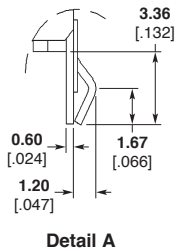
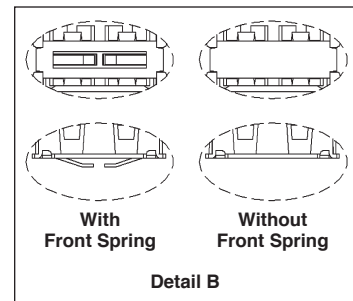
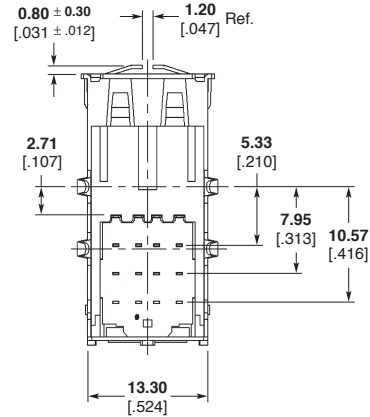
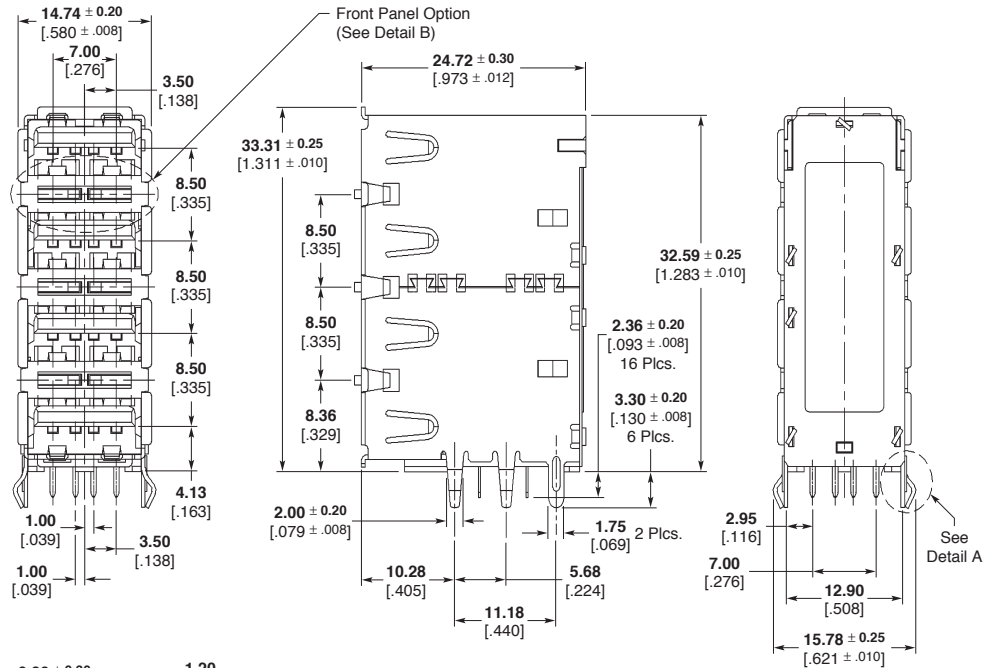
**Front Shield** — Brass, tin plated on entire, nickel underplated overall

**Rear Shield** — Brass, nickel plated

**Ground Finger** — Brass, tin plated on entire, nickel underplated overall

**Recommended PCB Thickness** — 1.60 [0.63]

**Product Specification**  
108-57391

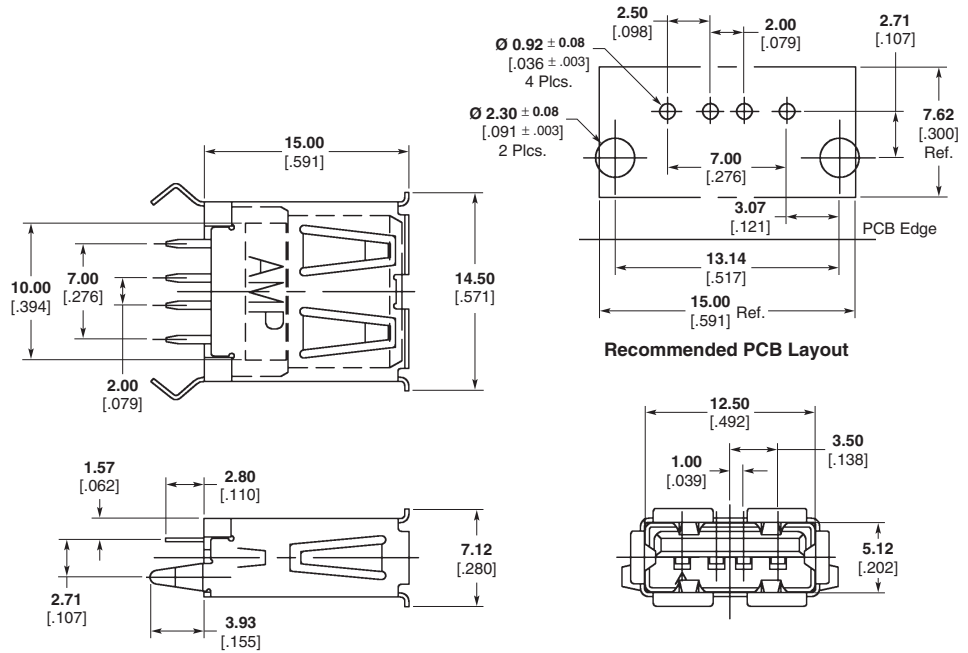


**Series A Receptacle Assemblies** (Continued)

**Vertical, Thru-Hole**

**Part Number**  
1734366-1

**Product Specification**  
108-57547





**Series A Plug Assemblies**

**Edge Mount, SMT**

**Part Number**  
1734080-1

**Material and Finish**

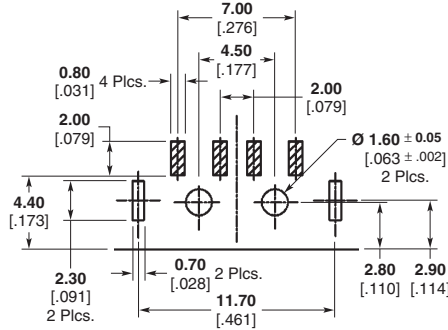
**Housing** — High temperature thermoplastic, UL94V-0, black or white

**Contact** — Brass, plated gold on contact area and tin-lead on soldertails, nickel underplated

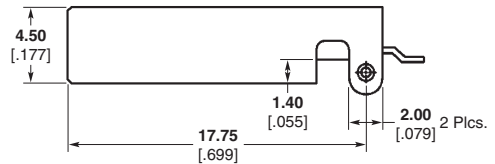
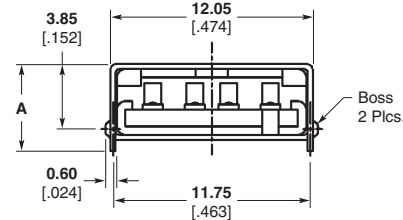
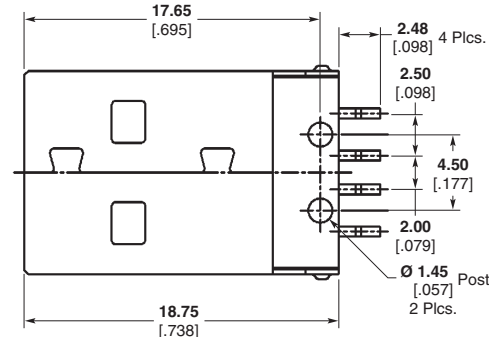
**Shield** — Steel, nickel plated, copper underplated

**Product Specification**  
108-57304

Dim. A	Part Number
5.85 .230	1470697-1
	1470697-2
	1-1470697-1 1-1470697-2
5.05 .199	2-1470697-1 thru 7-1470697-2



Recommended PCB Layout



**Edge Mount, SMT**

**Part Number**  
1734028-1

**Material and Finish**

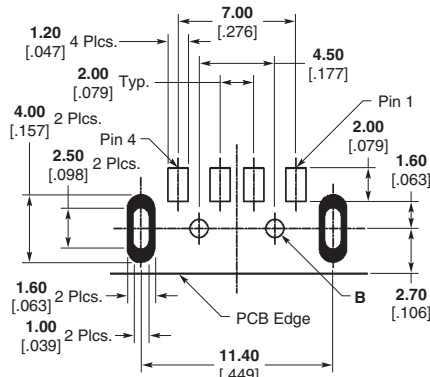
**Housing** — Thermoplastic, UL94V-0, black or natural

**Contact** — Brass, plated gold on contact area and tin-lead on soldertails, nickel underplated

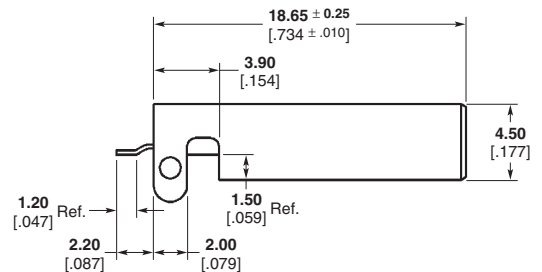
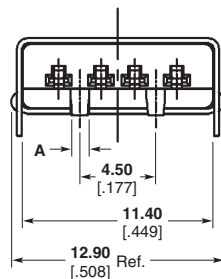
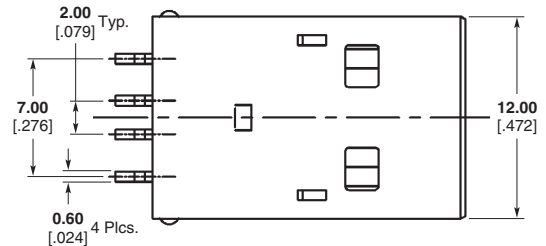
**Shield** — Steel, nickel plated, copper underplated

**Product Specification**  
108-57306

Dim. B	Part Number
1.10 .043	1734028-1
1.50 .059	1734028-2
1.10 .043	1734028-3
1.50 .059	1734028-4



Recommended PCB Layout



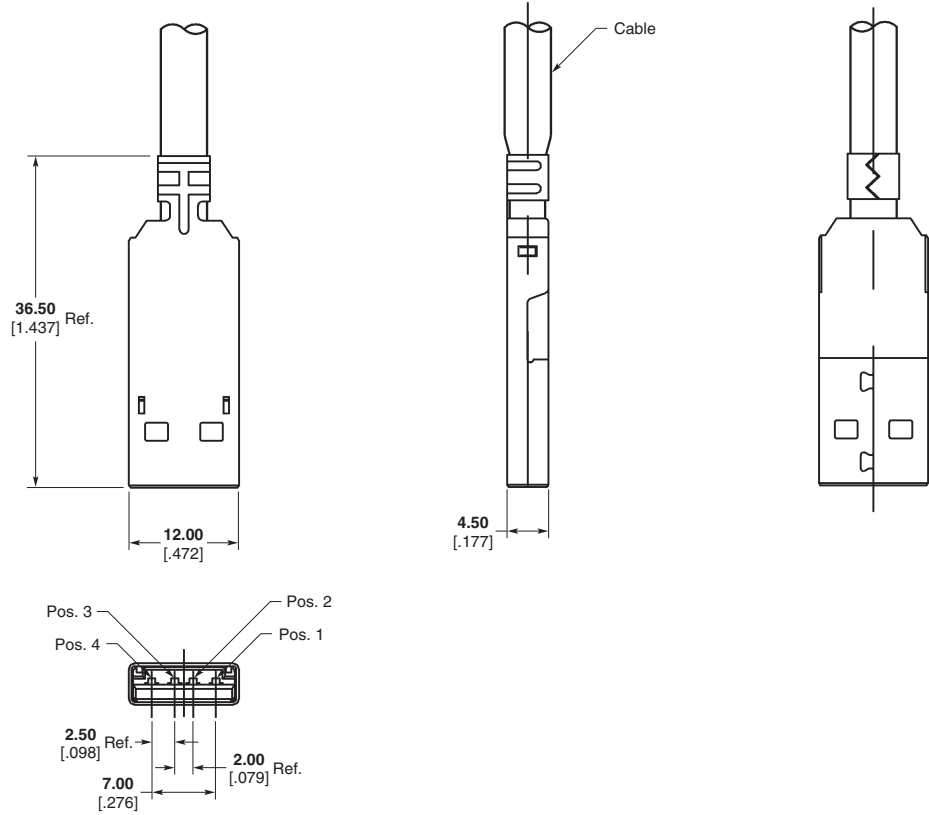
**Series A Plug Assemblies** (Continued)

**Cable Plug**

**Kit includes Housing with contacts cover, front and back shells**

**Part Number  
1734372-1**

**Product Specification  
108-57547**



**Series B Receptacle Assemblies**

**Right Angle, Thru-Hole**

**Part Number**  
292304-1

Loose Piece

**Material and Finish**

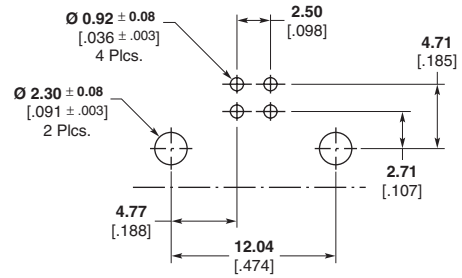
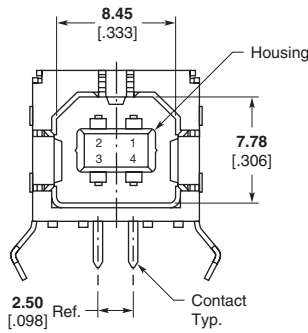
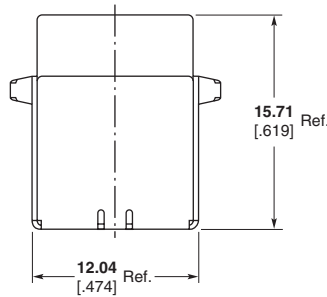
**Housing** — Thermoplastic, UL94V-0

**Shell** — Copper alloy, plated bright tin

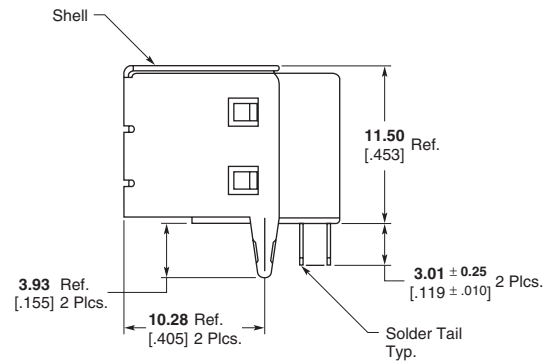
**Contacts** — Copper alloy, plated 0.076µm min. gold over 0.76µm min. palladium-nickel on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating or 0.076µm min. gold on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating.

**Recommended PCB Thickness** — 1.57 [.062]

**Product Specification**  
108-1586



**Recommended PCB Layout**



**Vertical Thru-Hole**

**Part Number**  
5787834-1

Loose Piece

**Material and Finish**

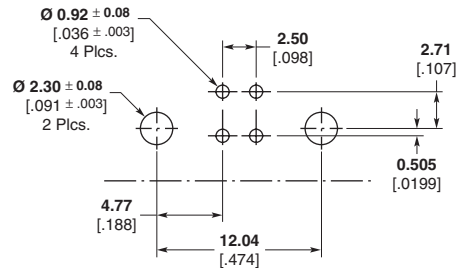
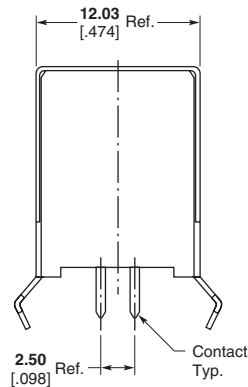
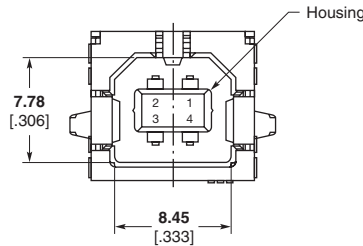
**Housing** — Thermoplastic, UL94V-0

**Shell** — Copper Alloy, plated bright Tin

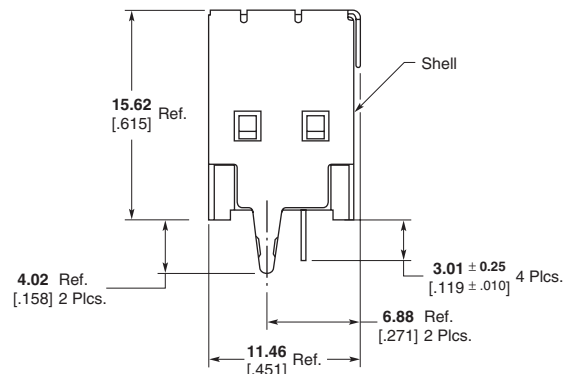
**Contacts** — Copper Alloy, plated 0.076µm min. Gold over 0.76µm min. palladium-nickel on the mating end, 3.8µm min. Tin lead on solder tails all over 1.27µm min. nickel underplating or 0.076µm min. Gold on the mating end, 3.8µm min. Tin lead on solder tails all over 1.27µm min. nickel underplating.

**Recommended PCB Thickness** — 1.57 [.062]

**Product Specification**  
108-1586



**Recommended PCB Layout**



**Series B Receptacle Assemblies** (Continued)

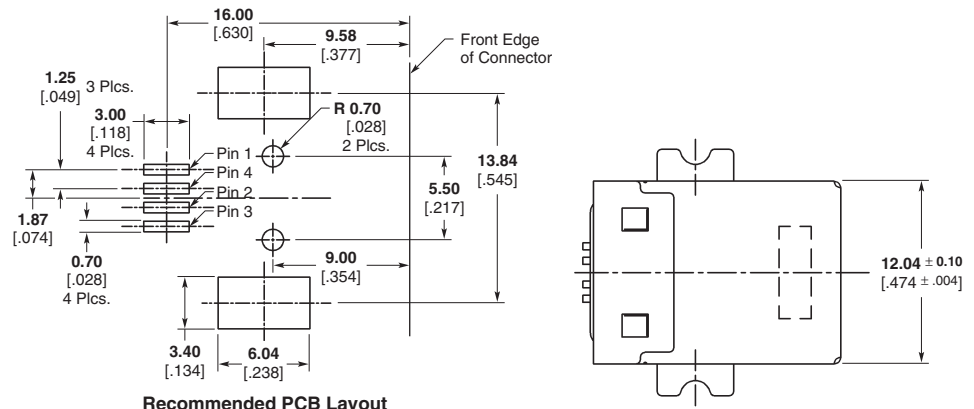
**Right-Angle, SMT**

**Part Number**  
1734346

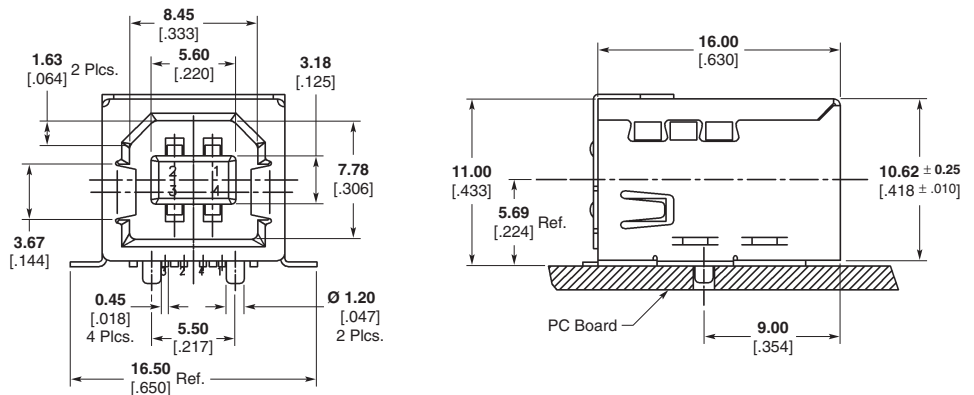
**Material and Finish**

- Housing** — High temperature thermoplastic, UL94V-0, black
- Contact** — Phosphor bronze, plated gold on contact area and tin-copper on soldertails, nickel underplated
- Front Shell** — Phosphor bronze, nickel plated
- Back Shell** — Stainless steel, nickel plated

**Product Specification**  
108-57538



**Recommended PCB Layout**



**Cable Plug**

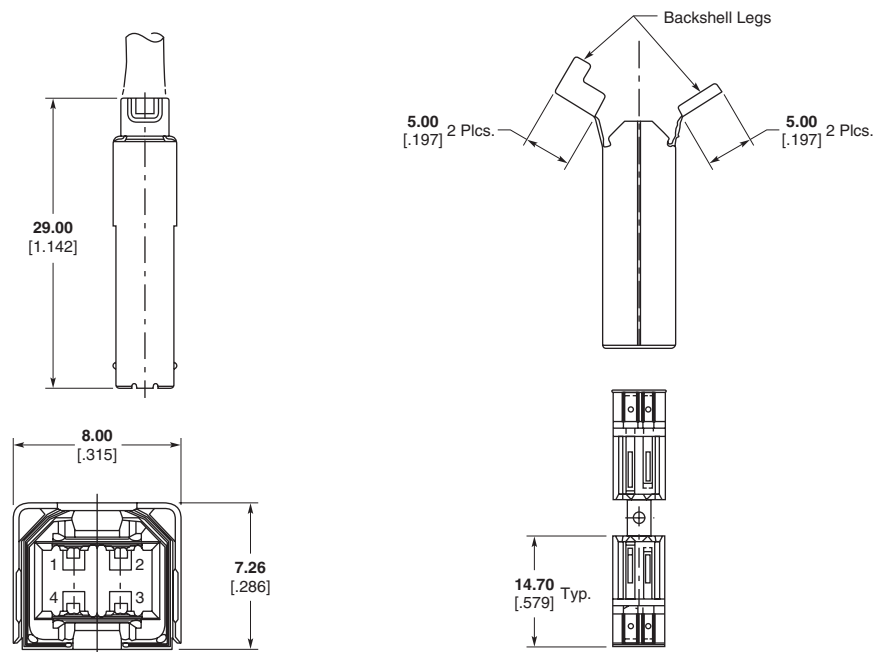
**Part Numbers**  
796007-3  
796006-4

Plug Housing & Contact Assembly (Loose Piece)

**Material and Finish**

- Housing** — Thermoplastic, UL94V-0
- Shell** — Copper alloy, plated bright tin
- Contacts** — Copper alloy, plated 0.076µm min. gold over 0.76µm min. palladium-nickel on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating or 0.076µm min. gold on the mating end, 3.8µm min. tin lead on solder tails all over 1.27µm min. nickel underplating.

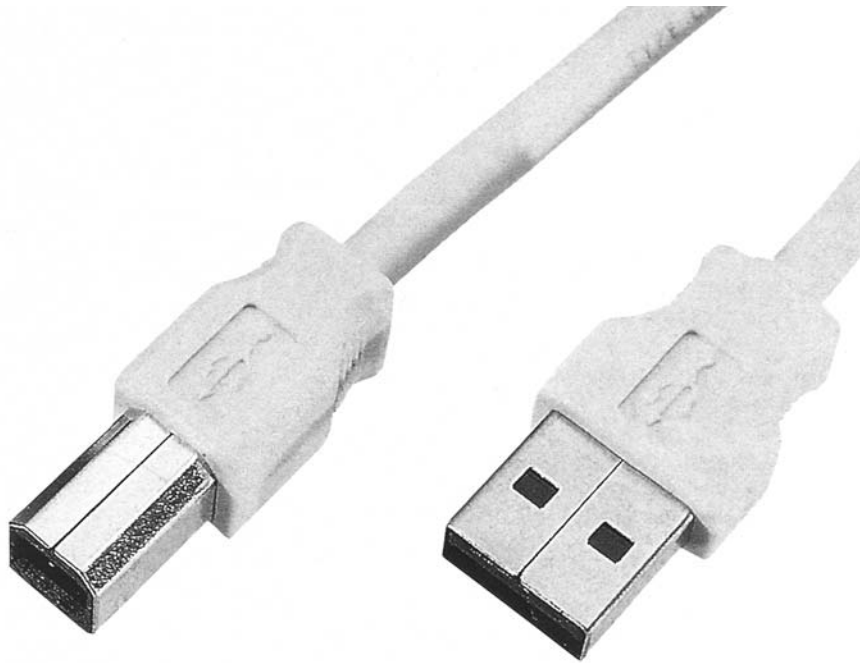
**Product Specification**  
108-1586



**USB Cable Plug Cable Assemblies**

**Product Facts**

- Support latest technology for personal computer Plug and Play peripheral connectivity
- Uses Serial Bus technology to connect USB equipped personal computer to keyboards, mice, printers, video camera, etc
- Requires personal computer equipped with an "A" receptacle, Universal Serial Port
- Larger wire sizes are required for longer lengths to meet USB specifications for maximum current load and millivolt drop

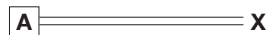


**Standard Universal Serial Bus (USB) Cable Assemblies Bus Extender Cable Assemblies**



Cable Construction	Length* m [ft]	Part Number
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG28 (0.08mm <sup>2</sup> ), Shielded	500 [1,640]	1487594-1
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG26 (0.15mm <sup>2</sup> ), Shielded	250 [820]	1487594-2
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG24 (0.20mm <sup>2</sup> ), Shielded	162 [531]	1487594-3
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG22 (0.40mm <sup>2</sup> ), Shielded	310 [1,017]	1487594-4
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG20 (0.60mm <sup>2</sup> ), Shielded	4.0 [13]	974329-1
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG20 (0.60mm <sup>2</sup> ), Shielded	5.0 [16]	974329-2

**Blunt End-Cut Assemblies for connecting to devices, such as keyboard, mice, etc.**



Cable Construction	Length* m [ft]	Part Number
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG28 (0.08mm <sup>2</sup> ), Shielded	0.83 [2.7]	974538-1
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG26 (0.15mm <sup>2</sup> ), Shielded	1.0 [3.3]	974539-1
2/AWG28 (0.08mm <sup>2</sup> ), 2/AWG24 (0.20mm <sup>2</sup> ), Shielded	2.0 [6.6]	974540-1

\*Indicates preferred lengths.

**Mini USB Connector and Cable Assemblies Input/Output**

**Product Facts**

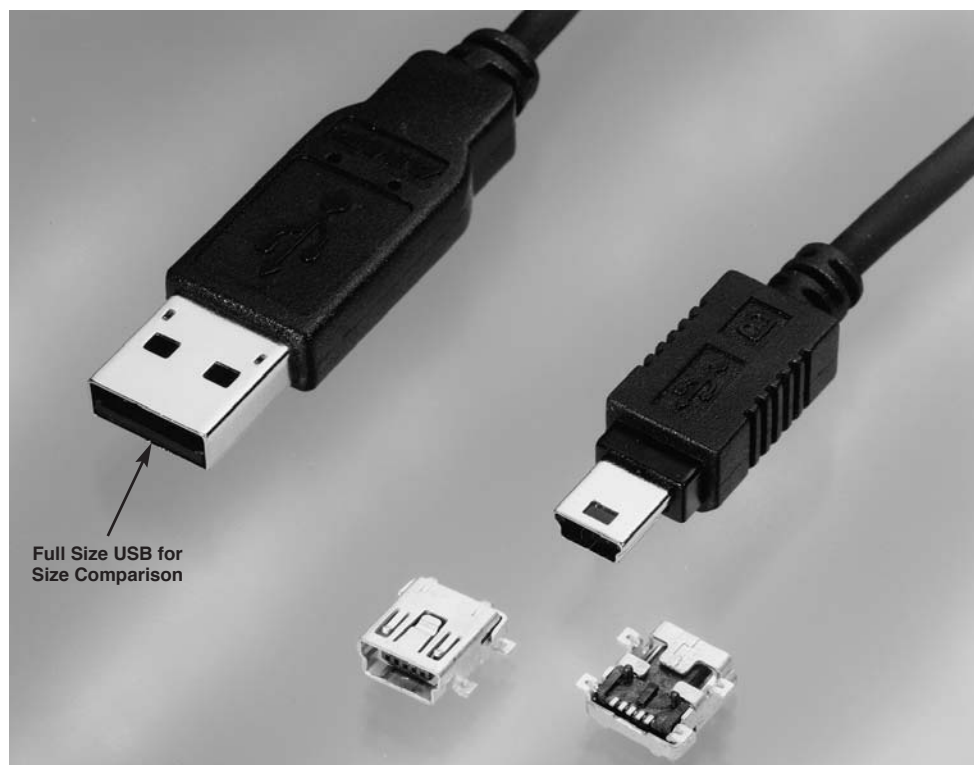
- Designed to meet the USB 2.0 specifications
- Single 5-Position (one ID pin) receptacle connector polarized for proper orientation
- Used in next generation high density computer peripherals, PDA's, palm tops and cell phones
- Designed for 480MB/s transfer rate

**Mini USB Types**

- High density design, allows for all the benefits of USB in a smaller package than traditional USB connectors
- **Mini-A** receptacle is keyed to allow a device to act as the host. It has four solder hold downs, which provide stability in mating and unmating by preventing stress on SMT connector leads
- **Mini-B** receptacle is keyed to allow device to act as a peripheral
- **Mini-AB** receptacle is keyed for devices that can act as a host or peripheral

**Applications**

- Supports latest technology for personal computer Plug and Play peripheral connectivity
- Uses serial bus technology to connect USB personal computers to PDA's, cell phones, video cameras, scanners, printers, keyboard and mouse

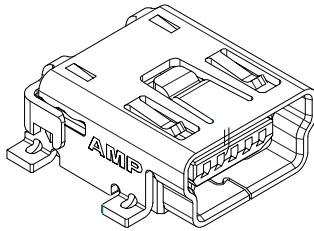


**Part Matrix**

Product	Series	Part Number	RoHS Compliant	Packaging	Page Number
Header	Mini-A	440478-1	1734327-1	Tray	15
		440478-2	1734327-2	T/R	15
	Mini-B	440247-1	1734035-1	Tray	16
		440247-2	1734035-2	T/R	16
	Mini-AB	440479-1	1734328-1	Tray	15
		440479-2	1734328-2	T/R	15
Plug	Mini-A	440315	—	Loose Piece	17
	Mini-B	—	1734205-1	Loose Piece	17

**Mini USB Receptacle Assemblies** (Continued)

**Right Angle SMT**



**Part Numbers**

Mini-A	1734327-1	Tray
	1734327-2	T/R
Mini-B	440247-1	Tray
	440247-2	T/R
Mini-AB	440479-1	Tray
	440479-2	T/R

**Performance Data**

**Electrical**


**Dielectric Withstanding Voltage** — 100 VAC

**Current Rating** — 1.5A @ 250VAC min.

**Insulation Resistance** — 100 megaohms min.

**Contact Resistance** — 50 milliohms max.

**Contact Capacitance** — 2pf max per contact

**Safety Certification** — Recognized under the Component Program of Underwriters Laboratories, Inc.  File No. E81956

**Mechanical**

**Durability** — 5,000 cycles

**Mating Force** — 3.57 kg. max.

**Unmating Force** — .31 kg. min.

**Recommended PCB Board Thickness** — 1.57 [.062] and 0.80 [.031]

**Materials**

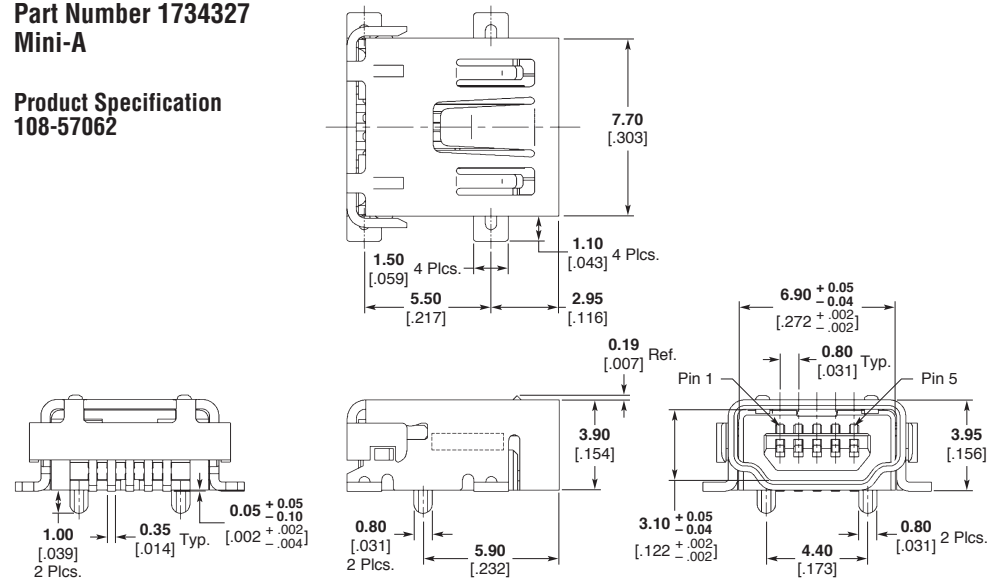
**Housing** — High temperature, thermoplastic glass filled; UL-94-V-0 rated; color black

**Shell** — Copper alloy

**Contacts** — .76 microns Au mating end, tin or tin/lead on solder tails as needed

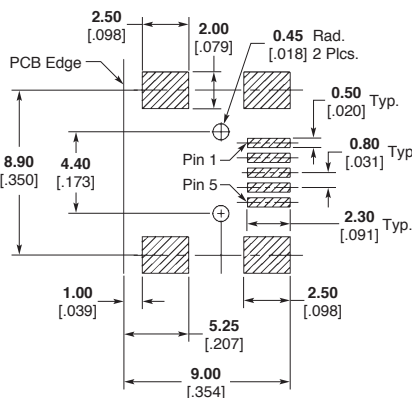
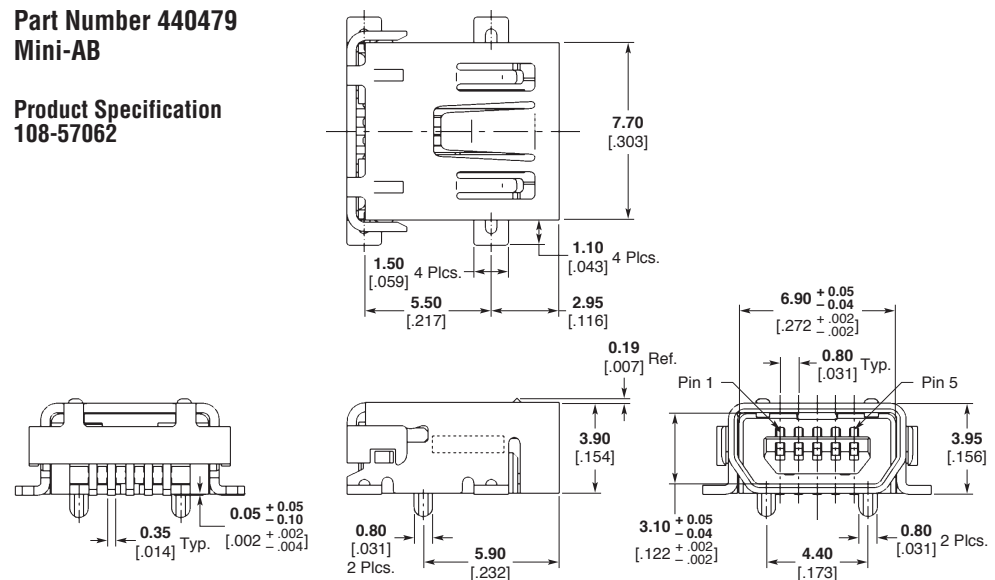
**Part Number 1734327**  
**Mini-A**

**Product Specification**  
**108-57062**



**Part Number 440479**  
**Mini-AB**

**Product Specification**  
**108-57062**



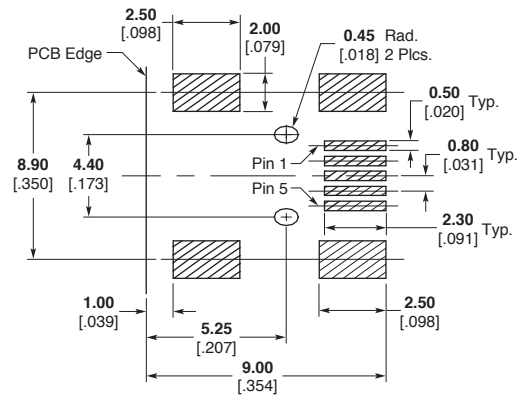
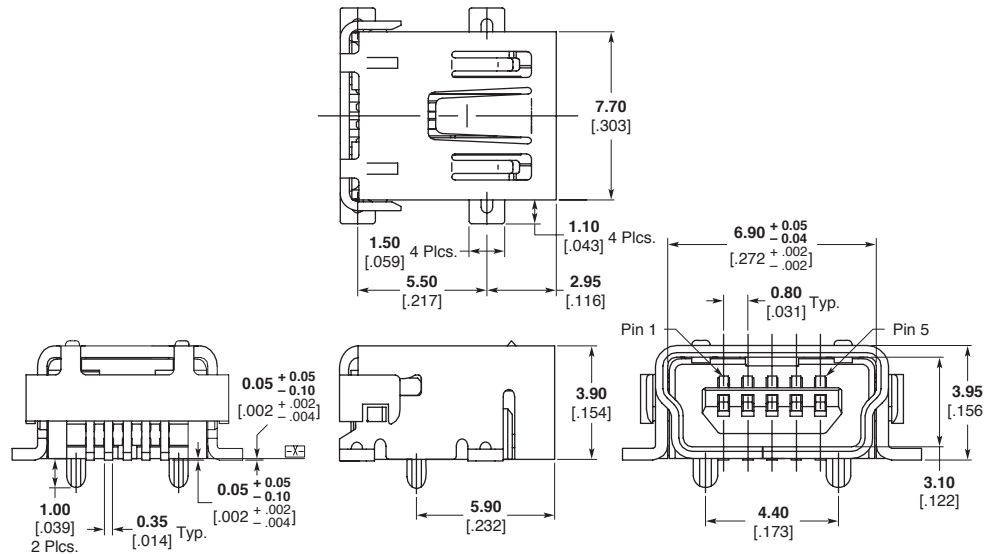
**Recommended PCB Layout**  
**(Mounting Side)**  
**for Part Numbers 440478 and 440479**  
**Thickness 1.57 [.062]**

**Mini USB Receptacle Assemblies** (Continued)

**Right Angle, SMT  
Mini-B**

Part Numbers: 440247  
RoHS Compliant: 1734035

Product Specification  
108-57062



**Recommended PCB Layout  
(Mounting Side)  
Thickness 1.57 [0.062]**

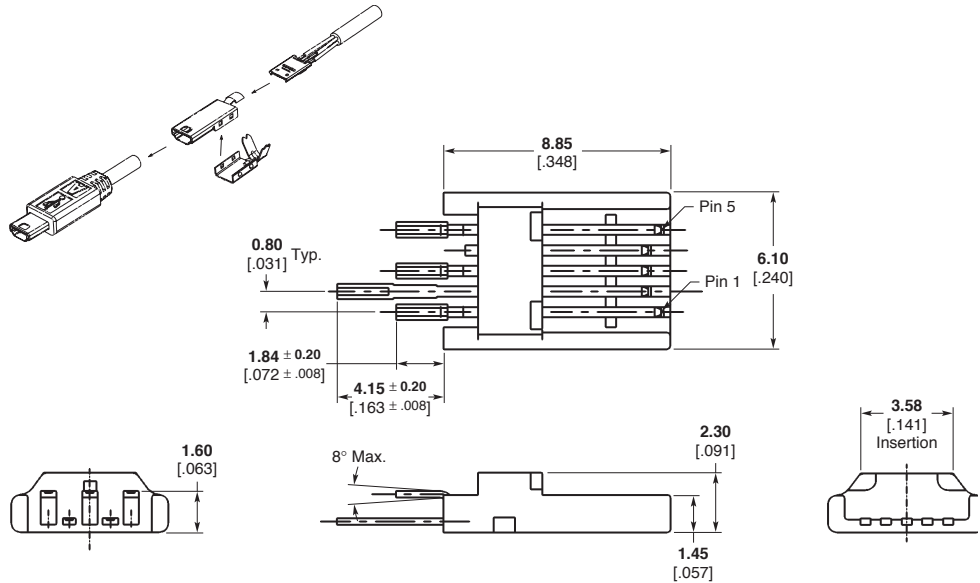


**Mini USB Plug Assemblies**

**Cable Plug  
Mini USB Type A**

**Part Number: 440315-1**  
**Lower Shell: 440315-2**  
**Upper Shell: 440315-3, &  
 1-440315-3**

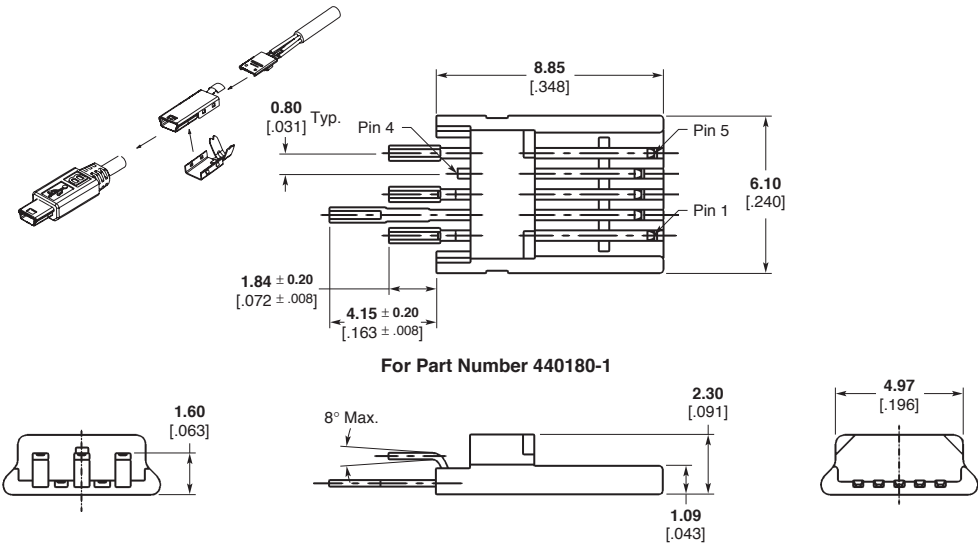
**Product Specification  
 108-57062**



**Cable Plug  
Mini USB Type B**

**Part Number 1734205-1**  
**Lower Shell and Upper  
 Shell**

**Product Specification  
 108-57062**

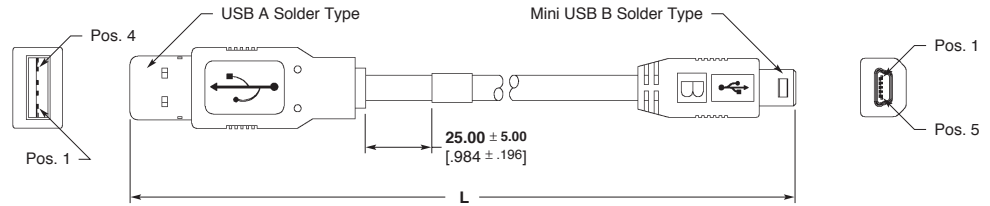


For Part Number 440180-1

For Part Number 1-440180-1

**Cable Assembly**

We currently offer a number of customer specials, but still only one standard cable assembly.





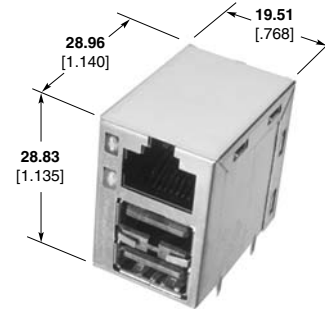
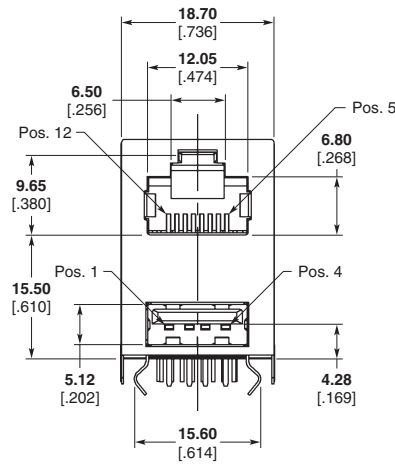
Part Number	Description	Dim. L (Cable Length)
1487586-1	Standard USB-A to Mini-B Assembly	0.500 m
1487586-2	Standard USB-A to Mini-B Assembly	0.250 m
1487586-3	Standard USB-A to Mini-B Assembly	0.162 m
1487586-4	Standard USB-A to Mini-B Assembly	0.310 m
1487587-1	Standard USB-A to Mini-B Assembly	1.000 m
1487587-2	Standard USB-A to Mini-B Assembly	1.300 m
1487587-3	Standard USB-A to Mini-B Assembly	0.830 m
1487588-1	Standard USB-A to Mini-B Assembly	2.000 m
1487588-2	Standard USB-A to Mini-B Assembly	1.500 m
1487588-3	Standard USB-A to Mini-B Assembly	1.829 m
1487589-1	Standard USB-A to Mini-B Assembly	3.000 m
1487589-2	Standard USB-A to Mini-B Assembly	2.500 m
1487590-1	Standard USB-A to Mini-B Assembly	4.000 m
1487590-2	Standard USB-A to Mini-B Assembly	5.000 m
1487591	Standard USB-A to NC Assembly	0.780 – 0.830 m
1487592	Standard USB-A to NC Assembly	0.950 – 1.000 m
1487593-1	Standard USB-A to NC Assembly	2.000 m
1487593-2	Standard USB-A to NC Assembly	1.500 m
1487594-1	Standard USB-A to Mini-B Assembly	0.500 m
1487594-2	Standard USB-A to Mini-B Assembly	0.250 m
1487594-3	Standard USB-A to Mini-B Assembly	0.162 m
1487594-4	Standard USB-A to Mini-B Assembly	0.310 m
1487595-1	Standard USB-A to Mini-B Assembly	1.000 m
1487595-2	Standard USB-A to Mini-B Assembly	1.300 m
1487595-3	Standard USB-A to Mini-B Assembly	0.830 m
1487596-1	Standard USB-A to Mini-B Assembly	2.000 m
1487596-2	Standard USB-A to Mini-B Assembly	1.500 m
1487596-3	Standard USB-A to Mini-B Assembly	1.829 m
1487596-4	Standard USB-A to Mini-B Assembly	1.000 m
1487597-1	Standard USB-A to Mini-B Assembly	3.000 m
1487597-2	Standard USB-A to Mini-B Assembly	2.500 m
1487597-3	Standard USB-A to Mini-B Assembly	3.500 m
1487598-1	Standard USB-A to Mini-B Assembly	4.000 m
1487598-2	Standard USB-A to Mini-B Assembly	5.000 m
1487599	Standard USB-A to NC Assembly	0.780 – 0.830 m
1487600	Standard USB-A to NC Assembly	0.950 – 1.000 m
1487601-1	Standard USB-A to NC Assembly	2.000 m
1487601-2	Standard USB-A to NC Assembly	1.500 m
1496476-1	Standard USB-A to Mini-B Assembly	1.000 m
1496476-2	Standard USB-A to Mini-B Assembly	1.500 m
1496476-3	Standard USB-A to Mini-B Assembly	2.000 m
1496476-4	Standard USB-A to Mini-B Assembly	3.000 m
1496476-5	Standard USB-A to Mini-B Assembly	5.000 m
1496476-6	Standard USB-A to Mini-B Assembly	12"

**RJ45 Over USB Series A**

**Stacked, Thru-Hole**

**Product Facts**

- Meets or exceeds FCC Part 68 rules and regulations; REA PE-76; and UL 1863, Communication Circuit Accessories
- Meets 1000 volt dielectric requirement Contact to Contact
- 20 dB shielding effectiveness from 30 MHz to 400 MHz
- Selectively gold plated contacts for lower cost
- All jacks are UL 94V-0 flame retardant polyester, standard color black, unless specified otherwise
- Listed by Underwriters Laboratories Inc., File No. E81956 
- Certified by Canadian Standards Association, File No. LR 7189A 
- Produced under a Quality Management System Certified to ISO 9001  
A copy of the certificate is available upon request



**Specifications**

**Electrical**

**Current Rating** — 1.5 amp max. @ 25°C, derated to 0.2 amp max. @ 70°C ambient  
**Voltage Rating** — 150 volts AC max.  
**Dielectric Withstanding Voltage** — 1000 VAC, RMS, 60 Hz, 1 min. Contact to Contact

**Mechanical**

**PC Board Retention** — will not dislodge from pc board when subjected to 1 lb. [4.4N] pull before soldering and 10 lb. [44N] pull after soldering  
**Durability** — 750 mating cycles

**Material and Finish**

**Housing** — Through-hole: Polyester (wave solder compatible), UL 94V-0 rated; Surface Mount: Polyphenylene Sulfide, or High Temp Nylon, UL 94V-0 rated  
**RJ45/2USB Contact** — 0.36 [.014] thk. Phosphor bronze; plated 0.00127 [.000050] gold in contact area and 0.00381 [.000150] tin-lead on solder tails, over 0.00127 [.000050] nickel underplate  
**RJ45/1USB Contact** — Gold flash plating on contact area and 0.00254 [.000100] tin on solder tails, over 0.00127 [.000050] nickel underplate

**Technical Documents**

- Application Specifications**  
 114-02048  
 114-6040  
**Product Specifications**  
 108-01163  
 108-01163-1  
 108-01163-3  
 108-01163-4  
 108-01163-7

No. of Ports	Part Number	Positions/Contacts	LEDs	Shielded	Performance	Panel Stops	Inverted	Ground Options
RJ45/1USB	1775855-1	8/8	Without	Yes	Cat 3	Without	No	PCB
RJ45/2USB	1116151-2	8/8	With	Yes	Cat 3	Without	No	PCB
RJ45/2USB	1116151-3	8/8	Without	Yes	Cat 3	Without	No	PCB
RJ45/2USB	1116640-2	8/8	With	Yes	Cat 3	Without	No	PCB

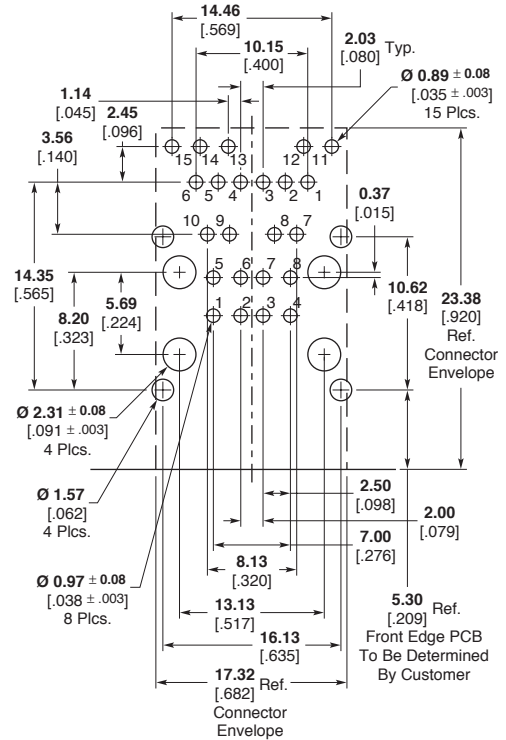
**Note:** Consult Tyco Electronics Customer Drawing for additional Part Numbers.

**MAG45 Modular Jacks with Integrated Magnetics Over Stacked USB Series A**

**Stacked, Thru-Hole  
USB/RJ45  
(10/100 Base-T or Gigabit)**

**Product Facts**

- USB/RJ45 with integrated magnetics
- 10/100 or Gigabit applications
- Stacked USB type A included
- UL Recognized
- Available with LEDs
- IEEE 802.3 & ANSI X3.263 Compliant
- USB 2.0 Compliant
- Numerous circuit options available
- Supports all appropriate and available PHY Chips and applications
- For assistance in part selection, please refer to the Tyco Electronics E-Catalog
- Your Tyco Electronics Sales Representative or one of the Product Information Centers listed below are also available to assist



PCB Footprint

**USB/RJ45\***

	10/100 Base-T	10/100 PoE	Gigabit	Gigabit PoE
	✓	No	✓	No

\*multiple LED colors with and without resistors available.

10/100	10/100 RoHS Compliant	Gigabit	Gigabit RoHS Compliant
1620004-1	6620004-1	1368162-1	6368162-1
1620002-1	6620002-1	1368472-1	6368472-1
1368532-1	6368532-1	1620009-1	6620009-1



**Americas**

**Argentina** – Buenos Aires  
 Phone: +54-11-4733-2200  
 Fax: +54-11-4733-2211

**Brazil** – São Paulo  
 Phone: +55-11-3611-1311  
 Fax: +55-11-3611-0397

**Canada** – Toronto  
 Phone: +905-475-6222  
 Fax: +905-474-5520

**Product Information Center: (Technical Support)**  
 Phone: +905-470-4425  
 Fax: +905-474-5525

**Colombia** – Bogota  
 Phone: +57-1-231-9398  
 Fax: +57-1-660-0206

**Mexico** – Mexico City  
 Phone: +52-55-1106-0800  
 Fax: +52-5-361-8545

**United States** – Harrisburg, PA  
 Phone: +717-564-0100  
 Fax: +717-986-7575  
**Product Information Center: (Technical Support)**  
 Phone: +800-522-6752  
 Fax: +717-986-7575

**For Latin/South American Countries not shown**  
 Phone: +54-11-4733-2015  
 Fax: +54-11-4733-2083

**Asia/Pacific**

**Australia** – Sydney  
 Phone: +61-2-9554-2600  
 Fax: +61-2-9502-2556  
**Product Information Center: (Technical Support)**  
 Phone: +61-2-9840-8200  
 Fax: +61-2-9634-6188

**India** – Bangalore  
 Phone: +91-80-285-40800  
 Fax: +91-80-285-40820

**Indonesia** – Jakarta  
 Phone: +65-6482-0311  
 Fax: +65-6482-1012

**Japan** – Toyko  
 Phone: +81-44-844-8111  
 Fax: +81-44-812-3207  
**Raychem & Identification Products**  
 Phone: +81-44-844-8183  
 Fax: +81-44-844-8184  
**Product Information Center: (Technical Support)**  
 Phone: +81-44-844-8013  
 Fax: +81-44-812-3200

**Korea** – Seoul  
 Phone: +82-2-3415-4500  
 Fax: +82-2-3486-3810

**Malaysia** – Kuala Lumpur  
 Phone: +60-3-78053055  
 Fax: +60-3-78053066

**New Zealand** – Auckland  
 Phone: +64-9-634-4580  
 Fax: +64-9-634-4586

**Philippines** – Makati City  
 Phone: +632-848-0171  
 Fax: +632-867-8661

**People's Republic of China**  
 Hong Kong  
 Phone: +852-2735-1628  
 Fax: +852-2735-0243  
  
 Shanghai  
 Phone: +86-21-64857333/64850602  
 Fax: +86-21-64856222/54260190

**Singapore** – Singapore  
 Phone: +65-6482-0311  
 Fax: +65-6482-1012  
**Raychem Products**  
 Phone: +65-4866-151  
 Fax: +65-6545-514  
**Identification Products**  
 Phone: +65 (0) 6482-0311  
 Fax: +65 (0) 6481-5514

**Taiwan** – Taipei  
 Phone: +886-2-8768-2788  
 Fax: +886-2-8768-2268

**Thailand** – Bangkok  
 Phone: +66-2-955-0500  
 Fax: +66-2-955-0505

**Vietnam and Indochina** –  
 Ho Chi Minh City  
 Phone: +84-8 930-5546  
 Fax: +84-8 930-3443

**Europe/Middle East/Africa**

**Austria** – Vienna  
 Phone: +43-1 90 5 60-0  
 Fax: +43-1 90 5 60-1333

**Belgium** – Kessel-Lo  
 Phone: +32-16-35-23-00  
 Fax: +32-16-35-23-52

**Bulgaria** – Sofia  
 Phone: +359-2-971-2152  
 Fax: +359-2-971-2153

**Czech Republic** – Kurim  
 Phone: +420-5-41-162-111  
 Fax: +420-5-41-162-223

**Denmark** – Glostrup  
 Phone: +45-43-480-452  
 Fax: +45-43-441-414

**Egypt** – Cairo  
 Phone: +20-2-417-76-47  
 Fax: +20-2-419-23-34

**Finland** – Helsinki  
 Phone: +358-95-12-34-20  
 Fax: +358-95-12-34-250

**France** – Cergy-Pontoise  
 Phone: +33-1-3420-8888  
 Fax: +33-1-3420-8600  
**Product Information Center: (Technical Support)**  
 Phone: +33-1-3420-8943  
 Fax: +33-1-3420-8623

**Germany** – Bensheim  
 Phone: +49-6251-133-0  
 Fax: +49-6251-133-1600  
**Product Information Center: (Technical Support)**  
 Phone: +49-6251-133-1999  
 Fax: +49-6251-133-1988

**Germany** – Langen  
 Phone: +49-6103-709-0  
 Fax: +49-6103-709-1223

**Germany** – Speyer  
 Phone: +49-6232-30-0  
 Fax: +49-6232-30-2243

**Germany - HTS Division** – Neunkirchen  
 Phone: +49-2247-305-0  
 Fax: +49-2247-305-122

**Great Britain** – Stanmore Middlesex  
 Phone: +44-8706-080-208  
 Fax: +44-1793-572-109  
**Product Information Center: (Technical Support)**  
 Freephone GB: 0800-267-666  
 Phone: +44-208-420-8341 or 8343  
 Fax: +44-208-420-8081

**Great Britain – Raychem & Identification Products**  
 Phone: +44-1793-528171  
 Fax: +44-1793-572-516

**Greece** – Athens  
 Phone: +30-1-9370-396/397  
 Fax: +30-1-9370-655

**Hungary** – Budapest  
 Phone: +36-1-289-1000  
 Fax: +36-1-289-1010

**Ireland** – Dublin  
 Phone: +353-1-820-3000  
 Fax: +353-1-820-9790

**Israel** – Yokneam  
 Phone: +972-4-959-0508  
 Fax: +972-4-959-0506

**Italy** – Collegno (Torino)  
 Phone: +39-011-4012-111  
 Fax: +39-011-4031116

**Lithuania** – Vilnius  
 Phone: +370-5-2131-402  
 Fax: +370-5-2131-403

**Netherlands** – 's-Hertogenbosch  
 Phone: +31-73-624-62-46  
 Fax: +31-73-621-23-65  
**Product Information Center: (Technical Support)**  
 Phone: +31-73-6246-999  
 Fax: +31-73-6246-998

**Norway** – Nesbru  
 Phone: +47-66-77-8886  
 Fax: +47-66-77-8855

**Poland** – Warsaw  
 Phone: +48-22-45-76-700  
 Fax: +48-22-45-76-720

**Romania** – Bucharest  
 Phone: +40-21-311-3479/3596  
 Fax: +40-21-312-0574

**Russia** – Moscow  
 Phone: +7-095-926-5506/07/08/09  
 Fax: +7-095-926-5505

**Russia** – St. Petersburg  
 Phone: +7-812-718-8192  
 Fax: +7-812-718-8193

**Slovenia** – Ljubljana  
 Phone: +386-1561-3270  
 Fax: +386-1561-3240

**South Africa** – Port Elizabeth  
 Phone: +2741-503-4500  
 Fax: +2741-581-0440

**Spain** – Barcelona  
 Phone: +34-93-291-0330  
 Fax: +34-93-201-7879  
**Product Information Center: (Technical Support):**  
 Phone: +34-93-291-0330  
 Fax: +34-93-200-3779

**Sweden** – Upplands Väsby  
 Phone: +46-8-50-72-50-00  
 Fax: +46-8-50-72-50-01

**Switzerland** – Steinach  
 Phone: +41-71-447-0447  
 Fax: +41-71-447-0444

**Turkey** – Istanbul  
 Phone: +90-212-281-8181/2/3  
 Fax: +90-212-281-8184

**Ukraine** – Kiev  
 Phone: +380-044-206-2265  
 Fax: +380-044-206-2264

**For Middle East/African Countries Not Shown**  
 Phone: +33-1-3420-8866  
 Fax: +33-1-3420-8300

**Need more information?**

Call Technical Support at the numbers listed below.

Technical Support is staffed with specialists well versed in Tyco Electronics products. They can provide you with:

- Technical support
- Catalogs
- Technical Documents
- Product Samples
- Authorized Distributor Locations