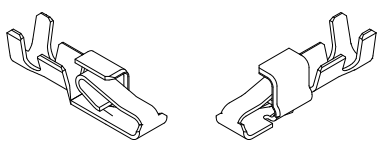
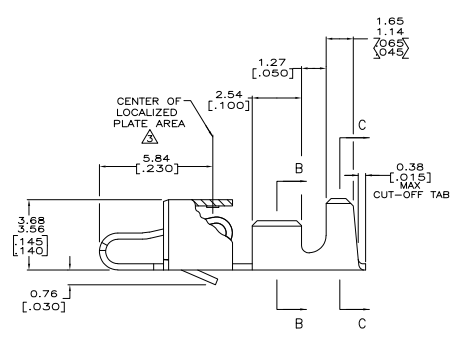
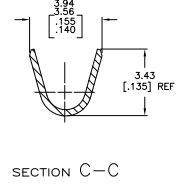
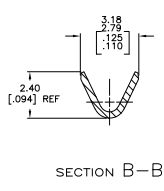
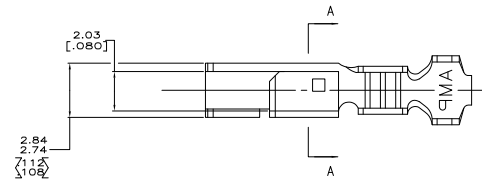
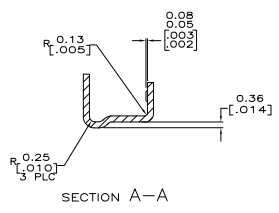


REV		REVISIONS			
CM	D	DESCRIPTION	DATE	BY	APP
	D	REVISED PER EDO-06-006795	17MAY16	KW	JE

1. INSULATION RANGE: 1.09-2.79 [.043-.110]  
 WIRE RANGE: 0.2-0.9 mm (24-18) AWG.
- $\Delta$  0.00203 [.000080] MIN BRIGHT TIN-LEAD OVER  
 0.00127 [.000050] MIN NICKEL.
- $\Delta$  0.00076 [.000030] MIN THICK GOLD STRIPES IN  
 LOCALIZED PLATE AREA ON BEAM AND DIMPLE OVER  
 0.00127 [.000050] MIN THICK NICKEL OVER ENTIRE  
 CONTACT.
4. DIMENSIONS IN BRACKETS ARE IN INCHES.
- $\Delta$  0.00203 [.000080] MIN BRIGHT TIN OVER  
 0.00127 [.000050] MIN NICKEL.



3-DIMENSIONAL MODELS  
NTS





$\Delta$	3-770522-1
$\Delta$	770522-2
$\Delta$	770522-1
FINISH	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE	17MAY2016
DESIGNED BY	J. ELLIS	DATE	17MAY2016
DRAWN BY	J. ELLIS	DATE	17MAY2016
CHKD BY	J. ELLIS	DATE	17MAY2016
APP'D BY	J. ELLIS	DATE	17MAY2016
ENGINEER	J. ELLIS	DATE	17MAY2016
REVISION			
SIZE	318 [0125] PH BRZ	DRAWING NO.	A100779G-770522
CUSTOMER DRAWING		SCALE	1:1
		SHEET	1 OF 1

Tys Electronics Corporation  
 Harrisburg, Pa 17105-3008  
**RECEPTACLE, SL-156,  
 LOOSE PIECE**  
 SIZE: 318 [0125] PH BRZ  
 DRAWING NO: A100779G-770522  
 SCALE: 1:1  
 SHEET: 1 OF 1

MTA-156  
.156 [3.96]

**Product Facts**

- Provides four points of contact
- Greater current carrying capability than Standard MTA-156 Connectors
- Connector styles include both closed end and feed-thru with locking ramp, with and without polarizing tabs in 2 through 12 positions
- Available for wire ranges of 18–22 AWG [0.9–0.3 mm<sup>2</sup>]
- Contacts are lubricated for fretting corrosion protection
- Complies with Tyco Electronics Quality Specification 102-6, "Preparation of Design Objectives"
- Uses existing MTA application tooling for termination
- Quad connectors preloaded with contacts
- All contacts are slotted for insulation displacement (IDC) termination technique
- Connectors and headers are end-to-end stackable
- AWG size is "frosted" on the side of the connector
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association, File No. LR 7189 
- Satisfies the VDE requirements according to VDE 110, Insulation Group B, 250 vac for air and creepage paths

The MTA-156 Quad Connector provides a connection with four points of contact. The UL94V-0 rated connector with multi-point contacts provides greater current carrying capability than the Standard MTA-156 Connector. These connectors comply with Tyco Electronics Quality Specification 102-6\* and satisfy the VDE requirements according to VDE 110.

The connectors are available for wire ranges of 18–22 AWG [0.9–0.3 mm<sup>2</sup>] and in a variety of styles including closed end and feed-thru with locking ramp, with and without polarizing tabs.

Only one wire to be terminated into an IDC contact slot.

\*The 102-6 Quality Specification is the new procedure for "Preparation of Design Objectives". Its purpose is to provide a means for verifying the maximum current carrying capacity of the device.

**Note:** Refer to pages 70 through 74 for approved wire listings.

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 header and connector combination. Where a "Y" is indicated the combination is a valid mating pair.

		Headers															
		640383	640385	640389	640445	644611	644613	644615	644617	644749	644751	644752	644754	647123	647125	647126	647127
Connectors	644329	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644370	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644371	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644375	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644376	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644377	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644381	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644382	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644383	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644387	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644388	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	644389	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

**The MTA-156 Quad Connectors only mate with standard MTA-156 square post headers and use existing MTA application tooling for termination.**

**Performance Data**

- Voltage Rating** — 600 vac
- Current Rating** — 12.5 amp max. on a single circuit.
- For Multiple Circuit Loading** — refer to Product Specification for current rating chart.
- Low-Level Resistance** — 3.0 mΩ max. initial
- Dielectric Withstanding Voltage** — 1500 vac/1 min.
- Insulation Resistance** — 5000 MΩ min. initial
- Operating Temperature** — -55° C to +105° C

**Technical Documents**

**Product Specifications**

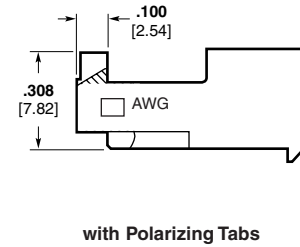
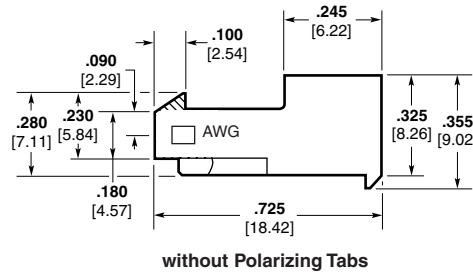
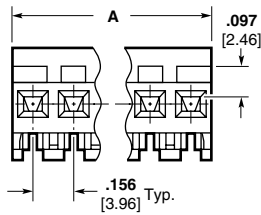
108-1219 MTA-156 Quad Connector System

**Application Specifications**

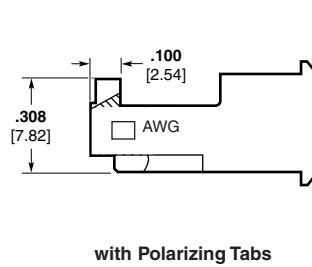
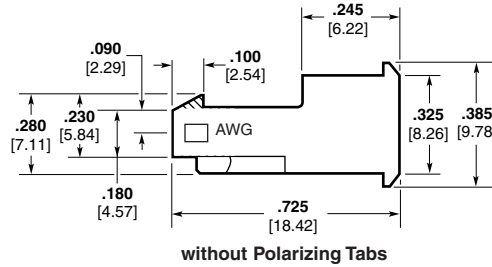
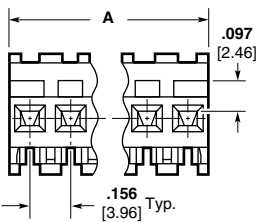
114-1048 MTA-156 Quad Connector

**MTA-156 IDC Quad Connectors—Closed End and Feed-Thru**

**Closed End with Locking Ramp**



**Feed-Thru with Locking Ramp**



**Material and Finish**

**Housing** — UL94V-0 rated, nylon, black

**Contacts** — High conductivity copper alloy, post tin plated

For mateability options, see matrix on page 54.

For strain relief and dust covers, see pages 40 and 41.

For mating half visuals, see pages 46 thru 48 and 50, 52 and 53, (49 and 51 Front Bend Headers only). **Mates with tin-plated square posts only.**

Refer to pages 70 thru 74 for approved wire listing.

**Note:** To determine connector overall length (Dim. A), multiply .156 x the number of circuits. Example: .156 x 10 circuits equals 1.560 inches [39.62 mm].

**Base Part Numbers**

Connector Type & Wire Size	Closed End with Locking Ramp				Feed-Thru with Locking Ramp			
	Without Tabs		With Tabs		Without Tabs		With Tabs	
	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>								
<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	644329	2-12 <b>32-42</b>	644381	2-12 <b>32-42</b>	644375	2-12 <b>32-42</b>	644387	2-12 <b>32-42</b>
<b>20 AWG</b> 0.5-0.6 mm <sup>2</sup>	644370	2-12 <b>32-42</b>	644382	2-12 <b>32-42</b>	644376	2-12 <b>32-42</b>	644388	2-12 <b>32-42</b>
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	644371	2-12 <b>32-42</b>	644383	2-12 <b>32-42</b>	644377	2-12 <b>32-42</b>	644389	2-12 <b>32-42</b>

**Connector Ordering Information**

The "Base Part Numbers" Chart above shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 10-position closed end connector with locking ramp and without polarizing tabs for 18 AWG wire would be:

Base number **644329** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-644329-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644329-2	3-644329-2
thru		
12	1-644329-2	4-644329-2

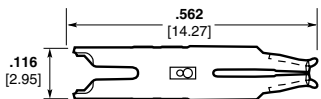
See page 15 for an explanation of RoHS lead free equivalents.

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Replacement IDC Contacts**

**Material and Finish**

**Contacts** — High conductivity copper alloy post tin plated



Wire Size	Part Numbers	
AWG	mm <sup>2</sup>	
18	0.8-0.9	3-644508-1
20	0.5-0.6	3-644509-1
22	0.3-0.4	3-644510-1

**Note:** Tyco Electronics does not recommend terminating an MTA contact more than one time. Use replacement contacts when required for field repairs or wire gage changes.

MTA-156  
.156 [3.96]

*Electronics*

**MTA-156 IDC Card Edge Connectors—Closed End and Feed-Thru**

**Material and Finish**

**Housing** — UL94V-0 rated, polyester, see chart for color

**Contacts** — Phosphor bronze, post tin plated

**Note:** Refer to pages 70 thru 74 for approved wire listings.

**Color Coding by Wire Size for UL94V-0 Connectors**

- 26 AWG — Blue
- 24 AWG — White
- 22 AWG — Red
- 20 AWG — Yellow
- 18 AWG — Orange

**Connector Ordering Information**

The “Base Part Numbers” Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 12-position closed end connector without mounting ears for 18 AWG wire would be:

Base number **640859** plus prefix-and-suffix **1- -2**

The correct ordering number is **1-640859-2**

See page 15 for an explanation of RoHS lead free equivalents.

**Performance Data**

**Voltage Rating** — 600 vac

**Current Rating** — 5 amp max.

**Low-Level Resistance** — 7 mΩ max. initial

**Dielectric Withstanding Voltage** — 1250 vac/1 min.

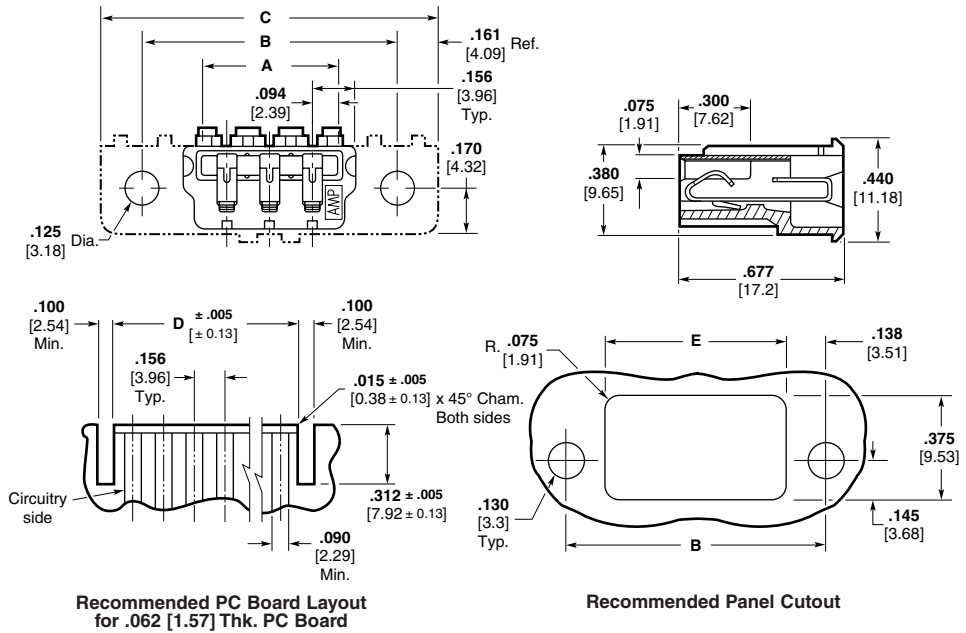
**Insulation Resistance** — 5000 MΩ min. initial

**Operating Temperature** — -55° C to +105° C

**Technical Documents**

**Product Specification**  
108-1058 MTA-156 Card Edge Connectors

**Application Specification**  
114-1020 MTA-156 Connectors, Posted Connectors and Card Edge Connectors



Recommended PC Board Layout for .062 [1.57] Thk. PC Board

Recommended Panel Cutout

**Base Part Numbers**

Connector Type & Wire Size	Closed End				Feed-Thru			
	Without Mounting Ears		With Mounting Ears		Without Mounting Ears		With Mounting Ears	
	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>								
18 AWG 0.8-0.9 mm <sup>2</sup>	640859	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	640864	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641283	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641288	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54
20 AWG 0.5-0.6 mm <sup>2</sup>	640860	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	640865	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641284	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641289	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54
22 AWG 0.3-0.4 mm <sup>2</sup>	640861	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	640866	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641285	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641290	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54
24 AWG 0.2 mm <sup>2</sup>	640862	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	640867	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641286	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641291	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54
26 AWG 0.12-0.15 mm <sup>2</sup>	640863	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	640868	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641287	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54	641292	3, 6, 9, 12, 15, 18, 20-24 33, 36, 39, 42, 45, 48, 50-54

No. of Circuits	Dimensions					Prefix/ Suffix
	A	B	C	D	E	
3	.500 [12.70]	.926 [23.52]	1.248 [31.70]	.484 [12.29]	.650 [16.51]	-3
6	.968 [24.59]	1.394 [35.41]	1.716 [43.59]	.952 [24.18]	1.118 [28.40]	-6
9	1.436 [36.47]	1.862 [47.29]	2.184 [55.47]	1.420 [36.07]	1.586 [40.28]	-9
12	1.904 [48.36]	2.330 [59.18]	2.652 [67.36]	1.888 [47.96]	2.054 [52.17]	1- -2
15	2.372 [60.25]	2.798 [71.07]	3.120 [79.25]	2.356 [59.84]	2.522 [64.06]	1- -5
18	2.840 [72.14]	3.266 [82.96]	3.588 [91.14]	2.824 [71.73]	2.990 [75.95]	1- -8
20	3.152 [80.06]	3.578 [90.88]	3.900 [99.06]	3.136 [79.65]	3.302 [83.87]	2- -0
21	3.308 [84.02]	3.734 [94.84]	4.056 [103.02]	3.292 [83.62]	3.458 [87.83]	2- -1
22	3.464 [87.99]	3.890 [98.81]	4.212 [106.98]	3.448 [87.58]	3.614 [91.80]	2- -2
23	3.620 [91.95]	4.046 [102.77]	4.368 [110.95]	3.604 [91.54]	3.770 [95.76]	2- -3
24	3.776 [95.91]	4.202 [106.73]	4.524 [114.91]	3.760 [95.50]	3.926 [99.72]	2- -4

MTA-156  
.156 [3.96]

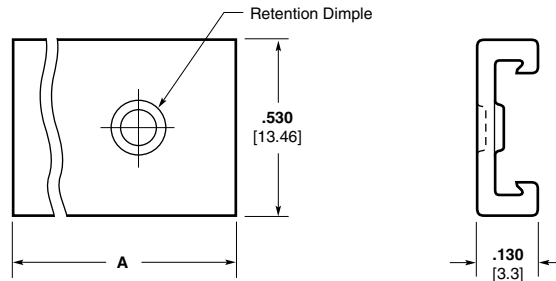
**MTA-156 IDC Card Edge Accessories**

**Dust Cover**

**Material (RoHS Compliant)**

UL94V-0 rated, polyester, white

Cover is for both Closed End and Feed-Thru connectors



**Cover Ordering Information**

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described cover.

Prefixes and suffixes are determined by the number of circuit positions in the cover. For example, the complete part number for a 12-position dust cover would be:

Base number **641106** plus prefix-and-suffix

**1- -2**

The correct ordering number is

**1-641106-2**

**Base Part Number**

Cover Part No.	No. of Circuits
641106	3, 6, 9, 12, 15, 18, 20-24

No. of Circuits	Dim. A	Prefix/Suffix
3	.504 12.80	-3
6	.972 24.69	-6
9	1.440 36.58	-9
12	1.908 48.46	1- -2
15	2.376 60.35	1- -5
18	2.844 72.24	1- -8
20	3.156 80.16	2- -0
21	3.312 84.12	2- -1
22	3.468 88.09	2- -2
23	3.624 92.05	2- -3
24	3.780 96.01	2- -4

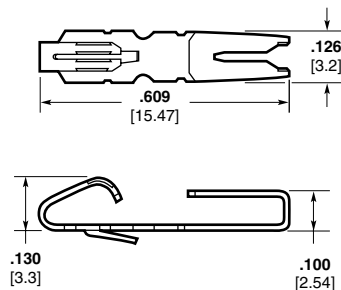
**Replacement IDC Contacts**

**Material and Finish**

Phosphor bronze; post tin plated

**Part Numbers**

- 3-640991-1 (18 AWG [0.8-0.9 mm<sup>2</sup>])
- 3-640992-1 (20 AWG [0.5-0.6 mm<sup>2</sup>])
- 3-640993-1 (22 AWG [0.3-0.4 mm<sup>2</sup>])
- 3-640994-1 (24 AWG [0.2 mm<sup>2</sup>])
- 3-640995-1 (26 AWG [0.12-0.15 mm<sup>2</sup>])

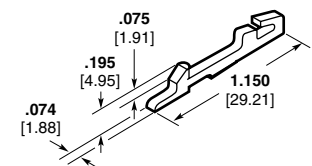


**Locking Plugs**

**Material (RoHS Compliant)**

UL94V-2 rated, nylon, white

Part Number 641101-1

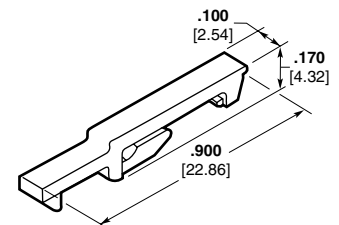


**Note:** Contact must be removed to install locking plug.

**Material (RoHS Compliant)**

UL94V-2 rated, nylon, white



Part Number 641293-1



**Note:** Contact can remain during locking plug installation.

**.156 [3.96] Centerline SL-156 Crimp Contacts and Housings**

**Product Facts**

- Rugged wire-to-board interconnection to mate with .045 square or round post headers or staked posts on .156 centers
- Standard Connectors accept wire range of 18–24 AWG [0.9–0.2 mm<sup>2</sup>] and LID Connectors accept wire range of 18–24 AWG [0.9–0.2 mm<sup>2</sup>] and a limited 16 AWG [1.29–1.42 mm<sup>2</sup>] (2550–2800 CMA)
- Two-piece interconnection system (connector/header)
- Housing made of flame retardant nylon
- Available in 1- through 24-position connector configurations
- Connectors are end-to-end stackable
- Wire-to-board system offers polarization with friction lock for positive mating
- Meets the material requirements of Table 23.1 of UL1410 Standard for High-Voltage Television Receivers and Video Productions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association, File No. LR7189 

**Technical Documents**

- Product Specification  
108-1049, 108-1049-1, 108-1049-2
- Application Specification  
114-1021

The AMP SL-156 connectors shown on the following pages are designed to mate with .045 [1.14] square or round post headers or staked posts on .156 [3.96] centers.

The wire-to-board connector is a two-piece connector system with the wire crimped to the contact, then inserted into the housing. This product mates with the MTA-156 flat, polarized and friction lock header, or staked posts (**not** MTA-156 shrouded headers).

**Performance Data**

- Voltage Rating** — 250 vac
- Current Rating** — 10 amp max. at 250 vac
- Low-Level Resistance** — 3.0 mΩ max. initial
- Dielectric Withstanding Voltage** — 2000 vac/1 min.
- Insulation Resistance** — 1000 MΩ min. initial
- Operating Temperature** — -55° C to +105° C

The Large Insulation Diameter (LID) Contacts and Housings are for use in applications where wire insulation is up to .112 [2.84] in diameter.

These matrixes represent only the housing and header combinations. You also need to consider the plating on the contacts and headers. Gold contacts with gold headers and tin contacts with tin headers.

**Matrix for Tin Plated Part Numbers**

		Headers																											
Housings	Standard	LID	640383	640384	640385	640387	640388	640389	640445	644611	644612	644613	644614	644615	644616	644617	644749	644750	644751	644752	644753	644754	644755	647227	647228	647229	647230	647260	647262
	640250	647401	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
640251	647400	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
770849	647402	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y

**Matrix for .000030 [0.00076] Gold Plated Part Numbers**

		Headers																					
Housings	Standard	LID	641202	641203	641204	641207	641208	641209	641210	644627	644628	644629	644630	644631	644632	644633	644756	644757	644758	644759	644760	644761	644762
	640250	647401	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
640251	647400	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
770849	647402	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N

**Matrix for .000015 [0.00038] Gold Plated Part Numbers**

		Headers																
Housings	Standard	LID	641113	641114	641115	641118	641119	641120	641121	644322	644763	644764	644765	644766	644767	644768	644769	647261
	640250	647401	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
640251	647400	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
770849	647402	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	

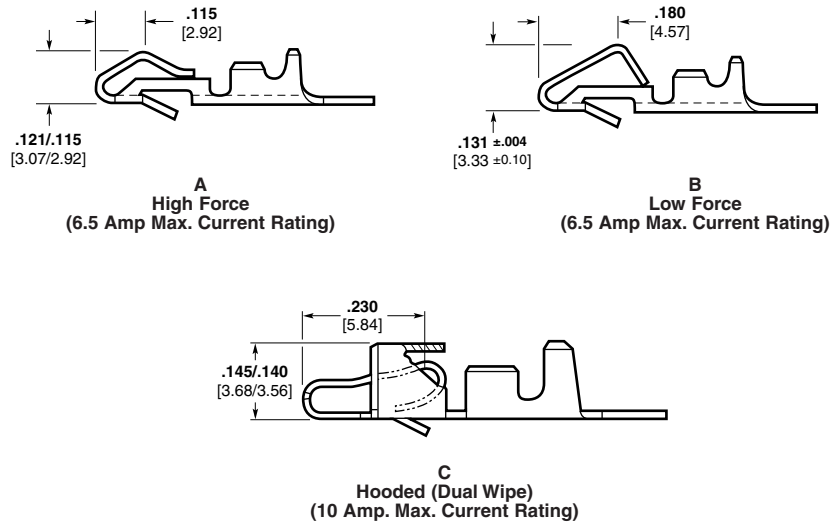
**SL-156 Crimp Contacts and Keying Plugs**

**Contacts**

**Material and Finish**

.012 [0.3] bright tin plated brass or phosphor bronze; .012 [0.3] pre-tin brass; or .012 [0.3] brass or phosphor bronze with .000030 [0.00076] gold over nickel (see chart)

- All tin-plated contacts are post lubricated to resist fretting corrosion
- Maximum insulation diameter is .105 [2.67]
- Wire range is 18-30 AWG [0.9-0.06 mm<sup>2</sup>]



**Application Note**

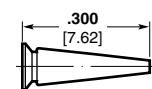
Part No. 640252 has a higher mating and unmating force than Part No. 350980 and is recommended to be used only in housings with 1 through 12 positions. Part No. 350980 can be used in any size housing but is recommended to be used in housings with 13 through 24 positions. Part No. 770476 is recommended for use in any size housing. Its mating force is similar to Part No. 350980 while unmating force is similar to 640252.

For housings, see pages 60 and 61.

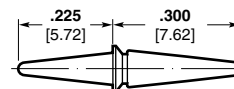
**Keying Plugs**

**Material (RoHS Compliant)**

UL94V-2 rated, nylon, natural color



**Keying Plug**  
Part No. 640254-1



**Keying Pin**  
Part No. 640255-1

Wire Size AWG mm <sup>2</sup>	Contact	Material and Finish	Part Numbers	
			Strip	Loose Piece
24-30 0.2-0.06	A	brass, pre-tin plated	641550-1	—
		brass, bright tin plated	640252-1	640706-1
		brass, pre-tin plated	640252-2	640706-2
18-24 0.9-0.2	A	brass, <b>RoHS Compliant</b>	3-640252-1	3-640706-1
		brass, bright tin plated	350980-1	640707-1
		brass, pre-tin plated	350980-2	—
	B	brass, gold plated	350980-3	770258-1
		brass, <b>RoHS Compliant</b>	3-350980-1	3-640707-1
		phosphor bronze, bright tin plated	770476-1	770522-1
	C	phosphor bronze, gold plated	770476-2	770522-2
		phosphor bronze, <b>RoHS Compliant</b>	3-770476-1	3-770522-1

**Application Tooling**

Extraction Tool  
Part No. 90471-1

**Loose Piece Contacts** —

PRO-CRIMPER II Hand Tool  
Part No. 58614-1 (408-4228)  
[For field service use only]  
For CERTI-CRIMP hand tool, contact Technical Support.

**Strip Contacts** —

AMP-O-LECTRIC Model "G"  
Termination Machine\*  
Applicator 680211-3  
(Request Catalog 65828)  
AMP-O-LECTRIC Model "K"  
Termination Machine\* Applicator  
466468-2  
AMP-O-MATIC Stripper-Crimper  
Machine\* SCA 466947-1 or 567828-1  
(with CQM) (Request Catalog 65004)  
AMPOMATOR CLS IV+ Lead Making  
Machine\* Applicator 466468-1  
(Request Catalog 82659)

\*Requires applicators. For part numbers, call Technical Support.

**SL-156 Housings—Wire-to-Board**

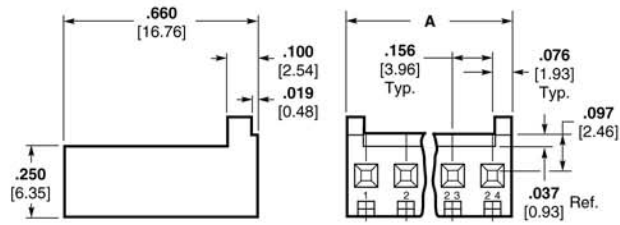
**Housings**

**Material (RoHS Compliant)**

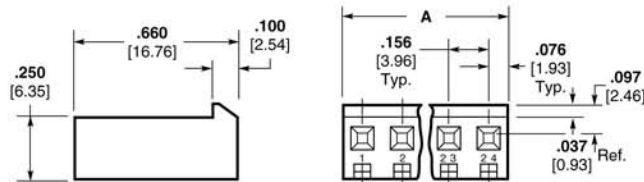
UL94V-0 rated, nylon, white

**Notes:**

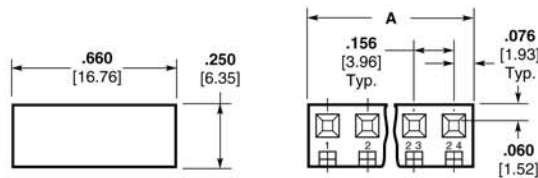
1. Accepts either .045 [1.14] square or round posts. Housings mate with flat and friction lock headers, or staked posts on .156 [3.96] centers.
2. Housings without ramp, with polarizing tab, available upon request. Minimums may apply.
3. Recommend contact: Part No. 640252 for 1 thru 12 positions; Part No. 350980 for 13 thru 24 positions; Part No. 770476 for 1 thru 24 positions.



(A) With Locking Ramp/With Polarizing Tabs



(B) With Locking Ramp/Without Polarizing Tabs



(C) Without Locking Ramp/Without Polarizing Tabs

**Note:** Dim. A = 0.156 × (No. of Positions – 1) + 0.152

For contacts, see page 59.

For mateability options, see matrix on page 58.

For mating half visuals, for connectors with locking ramp, see pages 46, 47, 48, 50 and 52, (49 and 51 Front Bend Headers only.)

For mating half visuals, for connectors without locking ramp, see pages 46 thru 52.

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.156 [3.96]

No. of Positions*	Housing	Description	Part Numbers*
2–24	A	With Locking Ramp and Polarizing Tabs	770849
1–24	B	With Locking Ramp and without Polarizing Tabs	640250
	C	Without Locking Ramp or Polarizing Tabs	640251

\*Base Part Number Prefixes and Suffixes indicate number of contact positions, e.g. 2 Position = 0-xxxxx-2 and 12 Position = 1-xxxxx-2.

**Note:** Housings not for use with LID Contacts. Shown on page 62.



**SL-156 Housings With Through Board Latch**

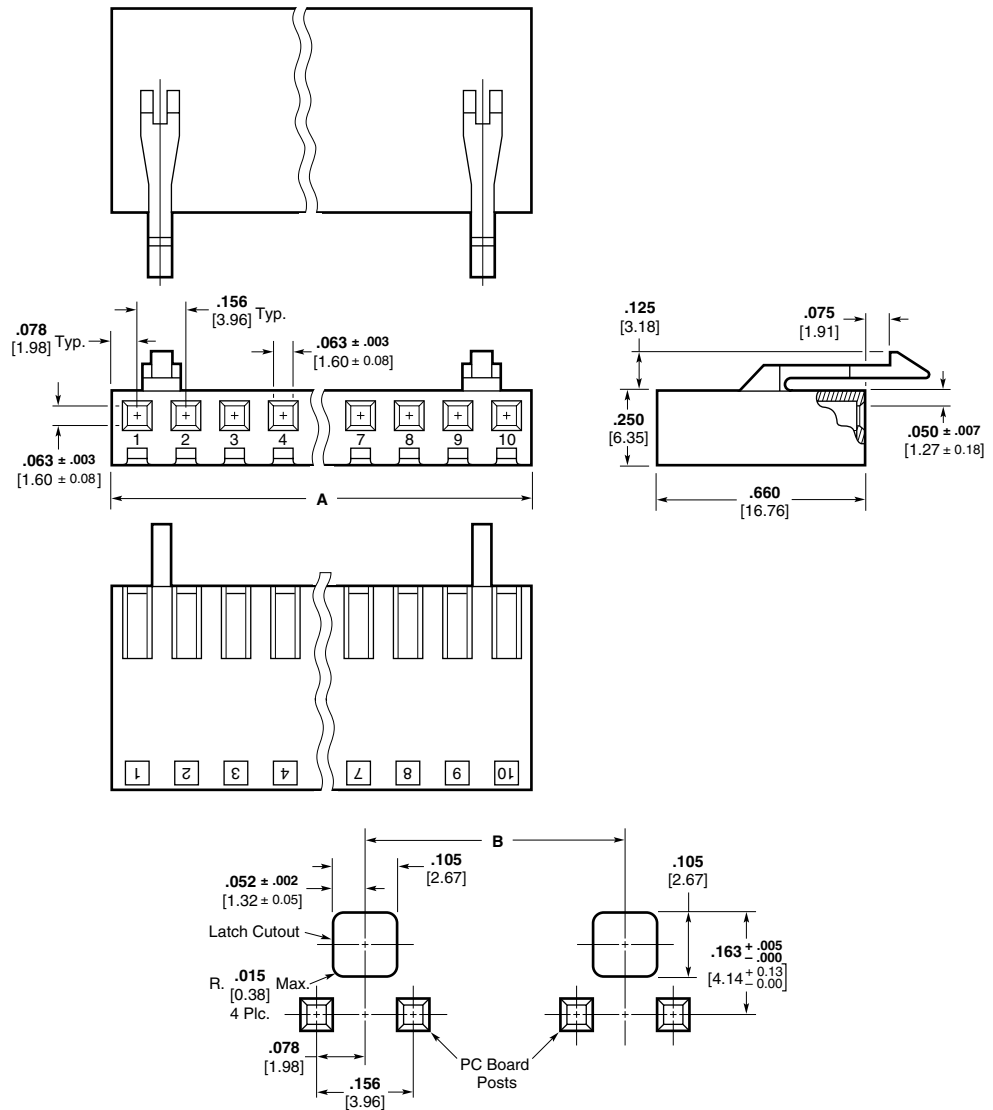
**Housings**

**Material (RoHS Compliant)**

UL94V-2 rated, nylon, white

**Mates with .045 square or round staked posts only.**

For contacts, see page 59



**Recommended PC Board Cutout  
for .062 [1.57] Thick PC Board**

No. of Pos.	Dimensions		Latch Location Centered Between Pos.	Part Number
	A	B		
2	.312 7.92	—	1 and 2	770894-2
3	.468 11.89	—	1 and 2	770894-3
4	.624 15.85	—	2 and 3	770894-4
5	.780 19.81	—	2 and 3	770894-5
6	.936 23.77	—	3 and 4	770894-6
7	1.092 27.74	—	3 and 4	770894-7
8	1.248 31.70	—	4 and 5	770894-8
9	1.404 35.66	1.092 27.74	1 and 2 & 8 and 9	770894-9
10	1.560 39.62	1.248 31.70	1 and 2 & 9 and 10	1-770894-0

**Note:** Not for use with LID Contacts. Shown on page 62.

**SL-156 Housings and Contacts for Large Insulation Diameter (LID) Wire**

**Housings**

**Material (RoHS Compliant)**

UL 94V-0 rated, nylon, white

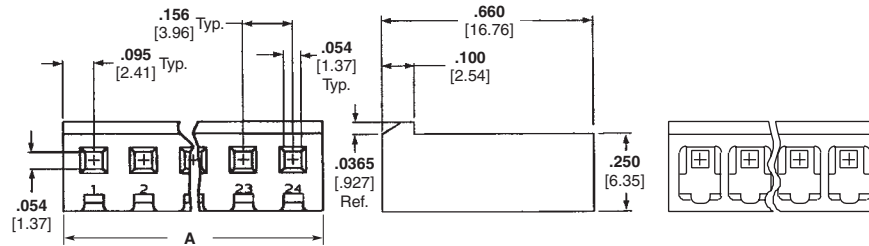
**Notes:**

1. Accepts Standard and LID contacts.
2. Larger opening in housings eases contact insertion when using wires that have large insulation diameters (.100-.112 [2.54-2.84]).
3. Housings are not End-to-End stackable.

For mateability options, see matrix on page 58.

For mating half visuals, for connectors with locking ramp, see pages 46, 47, 48, 50 and 52, (49 and 51 Front Bend Headers only.)

For mating half visuals, for connectors without locking ramp, see pages 46 thru 52.



**Note:** Dim. A = 0.156 × (No. of Positions – 1) + 0.19

No. of Positions*	Description	Part Numbers*	
		Housings with Larger Openings for Oversize Wire	
1-24	Without Locking Ramp or Polarizing Tabs	647400	
	With Locking Ramp and without Polarizing Tabs	647401 (shown above)	
2-24	With Locking Ramp and Polarizing Tabs	647402	

\*Base Part Number Prefixes and Suffixes indicate number of contact positions, e.g. 2 Position = 0-xxxxx-2 and 12 Position = 1-xxxxx-2.

**Contacts**

**Material and Finish**

.012 [0.3] bright tin plated phosphor bronze; .012 [0.3] phosphor bronze with .000030 [0.00076] gold over nickel (see chart)

- All tin-plated contacts are post lubricated to resist fretting corrosion
- Maximum insulation diameter is .112 [2.85]
- Wire range is 18-24 AWG [0.9-0.2 mm<sup>2</sup>] and a limited 16 AWG [1.29-1.42 mm<sup>2</sup>] (2550-2800 CMA)

**Product Specifications**

108-1049-1 and 108-1049-2

**Application Specification**

114-1021

**Application Tooling**

Extraction Tool Part No. 90471-1

**Loose Piece Contacts —**

PRO-CRIMPER II Hand Tool

Part No. 91368-1 [18-24 AWG]

Part No. 91369-1 [16 AWG]

(For field service use only.)

For CERTI-CRIMP hand tool, contact Technical Support.

**Strip Contacts —**

AMP-O-ELECTRIC Model "G"

Termination Machine\*

Applicator 1385048-3 [18-24 AWG]

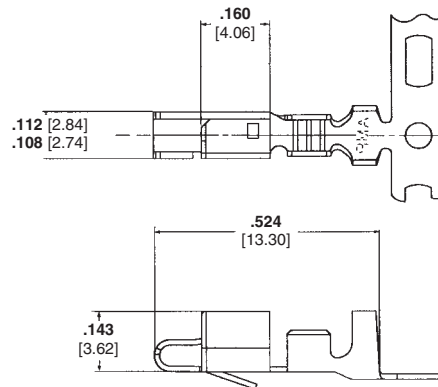
Applicator 1385219-3 [16 AWG]

AMP-O-ELECTRIC Model "K"

Termination Machine\*

Applicator 1385048-2 [18-24 AWG]

Applicator 1385219-2 [16 AWG]



**Hooded (Dual Wipe)  
(10 Amp Max. Current Rating)**

Wire Size	Material	Plating	Part Numbers For LID* Wire	
			Strip	Loose Piece
18-24 AWG	Phosphor Bronze	Tin	647406-1	647409-1
		Gold	647406-2	647409-2
		RoHS Compliant	3-647406-1	3-647409-1
16 AWG (2550-2800 CMA only)	Phosphor Bronze	Tin	647466-1	647485-1
		Gold	647466-2	647485-2
		RoHS Compliant	3-647466-1	3-647485-1

\*Large Insulation Diameter (.100-.112 [2.54-2.84])

**Notes:** 1. For information on application tooling, call Technical Support.

2. Can **not** be used with Standard SL-156 Housings, must be used with LID Housings only.

\*For additional part numbers and information contact Technical Support.

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.156 [3.96]