




AMPLIMITE .050 Series Connector (.050 x .100 [1.27 x 2.54] Centerline) Series III

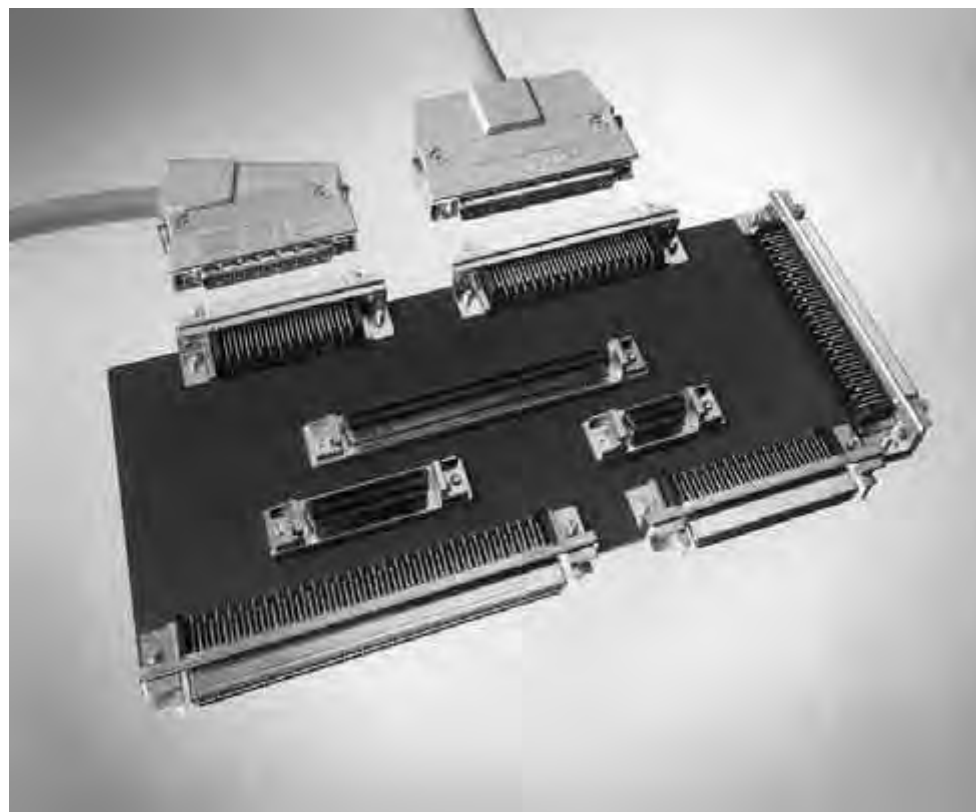
Product Facts

- Compatible with SCSI-2, SCSI-3, EIA RS-232, ISO-11569*, HIPPI, IPI-2 and IEE 802.3 MII standards
- High-density D type interface
- 20 through 100 contact positions
- Tab plug contacts and tuning-fork receptacle contacts, with reliable two-point (redundant) contact; contact normal force is not dependent on plastic housing support
- Excellent EMI/RFI protection
- Shields mate before contacts, with ground mating first and breaking last
- Squeeze-to-release latches or jackscrew hardware
- Board connectors compatible with standard thru-hole flow solder and surface-mount reflow solder processes (Series III)
- Recognized under the Component Program of Underwriters Laboratories Inc.,  File No. E28476
- Listed and complies with UL 1863, Communication Circuit Accessories  File No. E81956
- Certified by Canadian Standards Association,  File No. 1088108 (LR 7189A-207)

- Produced under a Quality Management System certified to ISO 9001 

A copy of the certificate is available upon request

*26-position cable assembly with spring latches



Introduction

Shielded AMPLIMITE .050 Series connectors offer a high-density D type interface. Featuring .050 x .100 [1.27 x 2.54] contact centerline spacing, these compact and reliable connectors are available in 20 through 120 positions. Their construction offers exceptional EMI/RFI shielding effectiveness.

Shielded AMPLIMITE .050 Series Connectors, Series III, are approved to SCSI-2, SCSI-3, EIA RS-232, ISO-11569*, IPI-2, HIPPI, and IEE 802.3 MII standards.

Connectors are available in cable-mount and panel mount versions and vertical and right-angle mount pcb headers plus vertical mount with ACTION PIN contacts. The headers feature high temperature housings for reflow soldering processes.

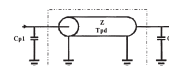
Cable and panel connectors use insulation displacement contacts for fast termination of discrete, round-to-flat laminated, and ribbon cable.

Series I, II and III intermateability:

Only the 50 and 68 position sizes are intermateable between Series I, II, and III.

Backshells are available with either a straight or angled cable exit. Hardware includes a choice of integral squeeze-to-release latches or jackscrews.

Unshielded, All-Plastic Cable Plugs are available in 50 through 100 positions and offer an economical answer to your connector needs on applications where EMI/RFI protection is not a factor.



AMP Single Line and Multi Line Models are available for AMPLIMITE Subminiature D Type connectors at www.tycoelectronics.com/simulation.

AMPLIMITE .050 Series Connector (.050 x .100 [1.27 x 2.54] Centerline) Series III (Continued)

Product Facts

- **Compact design, profile for the right-angle header** 1.230 x .588 [31.24 x 14.94], **vertical header** 1.230 x .433 [31.24 x 11.00], **right-angle stacked headers** 1.230 x .803 [31.24 x 20.40]
- **Housings and covers made of UL 94V-0 rated thermoplastic**
- **Header footprint for right-angle and stacked configurations is .100 x .050 [2.54 x 1.27] staggered centerlines**
- **Header footprint for vertical configuration is .100 x .075 [2.54 x 1.90] staggered centerlines**
- **Right-angle and stacked headers feature integral boardlocks for positive board retention and grounding**
- **Vertical headers feature 8 below the board, retentive contact legs for mechanical retention before and after soldering**
- **Vertical headers feature polarized grounding posts to assure correct header-to-board orientation**
- **Stacked headers reduce overall total header volume by 48% and PC board area by 38%**
- **Stacked headers offer optional contact shield for additional EMI/RFI protection**
- **Plugs preloaded with insulation displacement contacts (IDC) provide fast, reliable and economical terminations**
- **Choice of three keying positions, plus non-keyed inserts for assurance against mismatch mating**

Shielded AMPLIMITE .050 Series, Slimline Connectors answer today's industry requirement for higher density in a smaller overall package. The present line consists of 26 position, shielded right-angle and vertical PCB receptacle headers, 26 position right-angle stacked PCB receptacle header, and mating 26 position plug connectors. All header, plug and backshell housings are made of UL 94V-0 rated thermoplastic. PCB headers are compatible with surface mount reflow solder processes. Right-angle and stacked PCB headers feature contact footprints on .100 x .050 [2.54 x 1.27] staggered centerlines and vertical header footprints are on .100 x .075 [2.54 x 1.90] staggered centerlines.

The compact design of the **right-angle header** package measures only 1.230 W x .588 D x .300 H [31.24 W x 14.94 D x 7.62 H] for maximum board real estate conservation. Right-angle PCB headers feature integral boardlocks for positive board retention and grounding.

Vertical headers feature 8 below the board, retentive contact legs for mechanical retention before and after soldering. Polarized grounding posts provide correct header-to-board orientation. The complete package occupies an area only 1.230 W x .325 D x .433 H [31.24 W x 8.26 D x 11.00 H].

Right-angle stacked headers provide 52 contacts in a package only .635 [16.13] high, allowing parallel (board-over-board) board spacing of .800 [20.32].

Centerlines between the top connector and the bottom connector measure .335 [8.51] when compared to .400 [10.06] on the standard .050 Series stacked headers. This results in an overall reduction of total header volume, in comparison to the standard AMPLIMITE .050 Series header, of 48%, and a comparative reduction in PC board area of 38%.

Stacked header board retention and stabilization is provided by two boardlocks and four grounding posts. In addition, an optional rear contact shield is available for additional EMI/RFI protection.

The mating plug connector consists of a thermoplastic housing, preloaded with insulation displacement contacts (IDC) for fast, reliable terminations that offer greater applied cost savings. Tyco Electronics offers a choice of termination equipment to meet your production requirements.

The backshell hardware kit includes a two-piece, aesthetically designed, thermoplastic cover over an inner and outer shield and two, high strength #2-56 male jackscrews with insulated heads (easy finger grip caps) to secure mated connectors.

The AMPLIMITE .050 Series, Slimline family of connectors offers **keyed coupling**. This feature reduces the problem of mismatch mating of plug and receptacle, particularly in stacked applications. There are three possible keying arrangements, plus unkeyed inserts to assure maximum options for multiple connector applications.