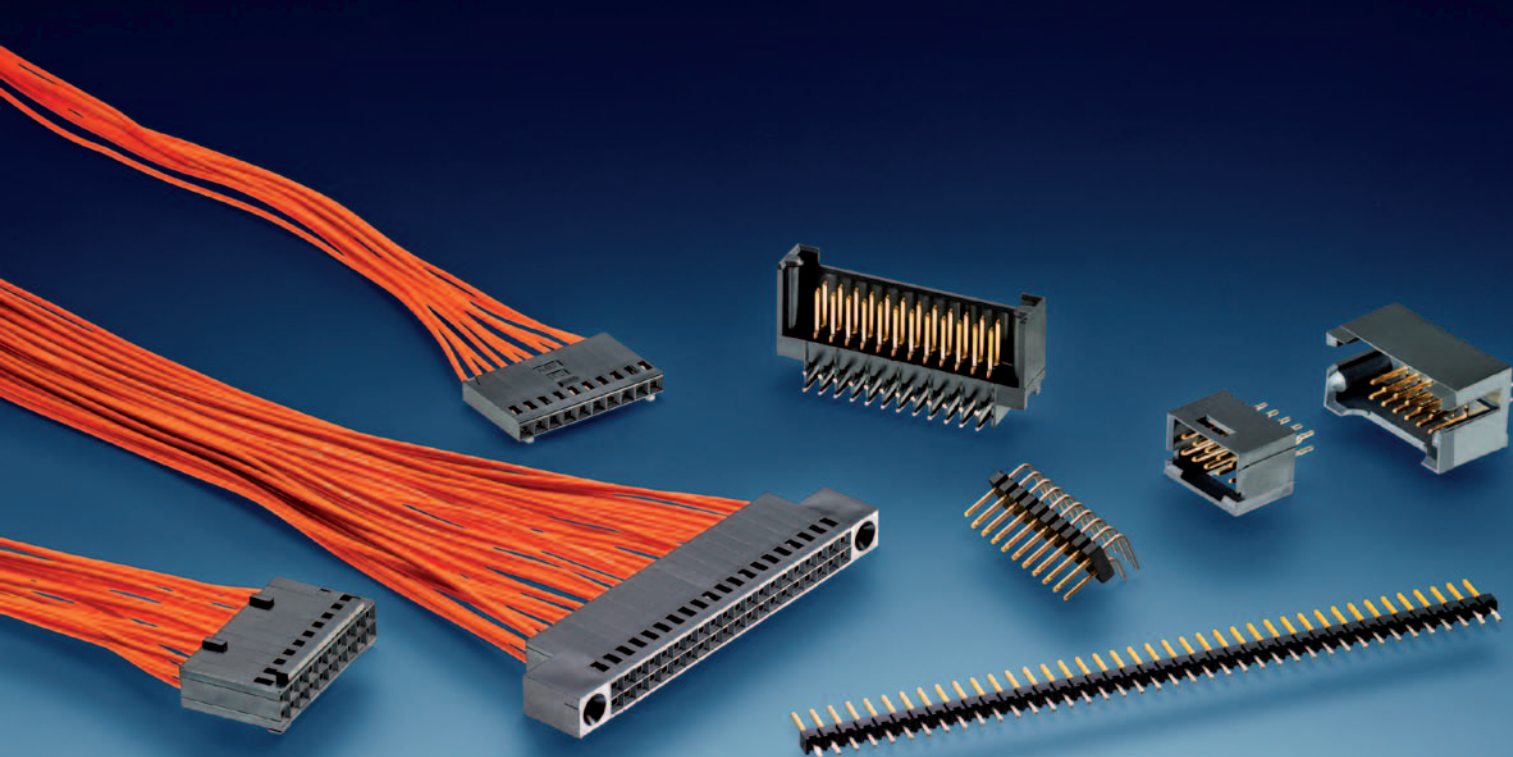




## Quick Reference Guide

### AMPMODU MOD IV, V Interconnection System & Shrouded & Breakaway Headers

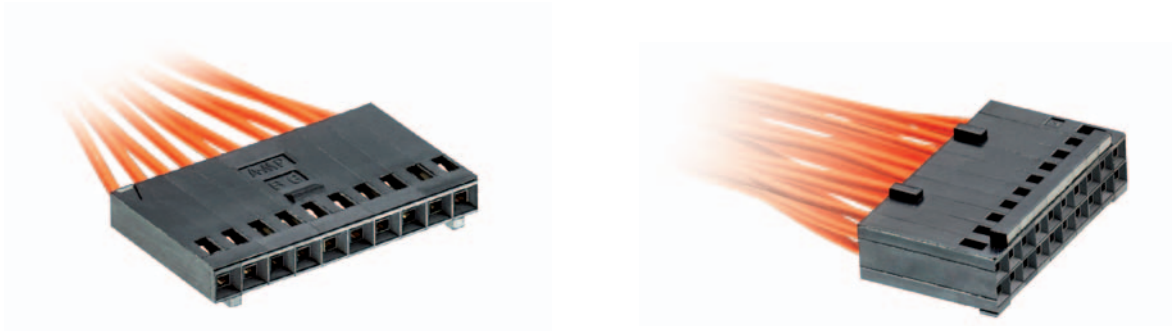
The AMPMODU Mod IV & V interconnection system offers a wide variety of rugged and reliable wire-to-board interconnections which mate to breakaway headers and shrouded headers that are utilized to distribute low current signals throughout electronic equipment. Mod IV is ideal for standard pressure applications with minimal vibrations. Mod V is ideal for high pressure applications with high vibrations. Breakaway Headers offer a wide range of flexibility allowing the customer to stock just one part number while allowing that customer to adjust the size of the header needed. Shrouded Headers offer superior pin protection and come in both latching and non latching configurations. Some are polarized to prevent misalignment.

#### FEATURES AND BENEFITS

- Categorized in two groups: board mount headers, and cable to board receptacles
- Available in single and double row, vertical or right angle, shrouded and breakaway
- Formed from high conductivity copper alloy and selectively plated with gold for higher performance and reliability
- Housings on all board-mounted assemblies are made of high temperature tolerant materials and incorporate stand-offs for free drainage of flux cleaning solutions

#### PRODUCT APPLICATIONS

- Medical Equipment
- Gaming Equipment
- Automotive Controls
- Servers
- Test/Measurement Devices
- Factory Automation
- Telecommunication Equipment
- Storage Equipment
- Vending



| Housing Style | Row Type   | No. of Positions | Part Number | Features         |
|---------------|------------|------------------|-------------|------------------|
| Polarized     | Single Row | 3                | 102241-1    | Detent Latching  |
|               |            | 20               | 1-102241-8  | Detent Latching  |
|               |            | 36               | 3-102241-4  | Detent Latching  |
|               | Double Row | 6                | 2-87977-8   | N/A              |
|               |            | 34               | 4-87977-2   | N/A              |
|               |            | 72               | 5-87977-4   | N/A              |
|               |            | 6                | 87631-1     | No Strain Relief |
|               |            | 34               | 87733-8     | Strain Relief    |
|               |            | 72               | 5-87631-8   | No Strain Relief |
|               |            | 8                | 1-102387-4  | Center Polarized |
|               |            | 26               | 102387-6    | Center Polarized |
|               |            | 64               | 1-102387-2  | Center Polarized |

Please refer to the product catalog for available position sizes

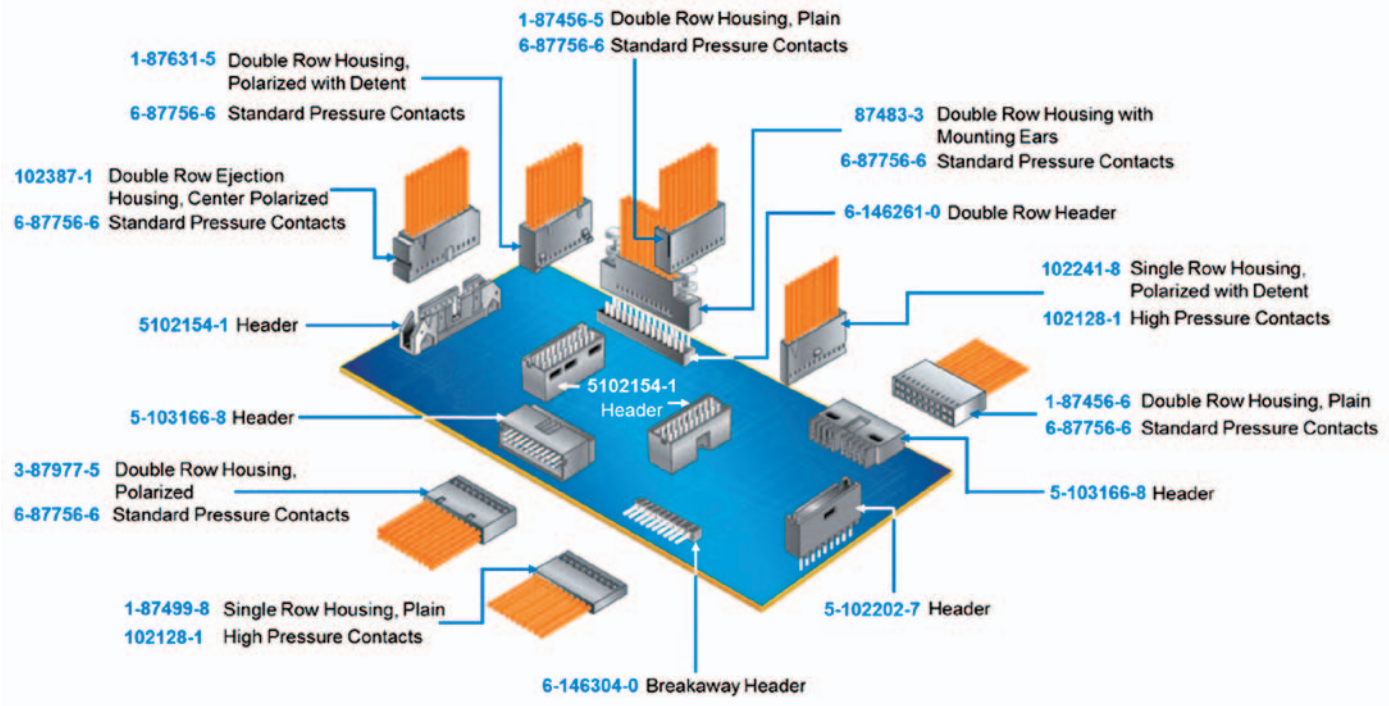


| Housing Style | Row Type   | No. of Positions | Part Number | Features     |
|---------------|------------|------------------|-------------|--------------|
| Non-Polarized | Single Row | 1                | 7-87499-2   | Unstamped PN |
|               |            | 20               | 3-87499-7   | Stamped PN   |
|               |            | 36               | 7-87499-0   | Unstamped PN |
|               | Double Row | 2                | 5-87456-3   | Unstamped PN |
|               |            | 32               | 2-87456-7   | Unstamped PN |
|               |            | 72               | 4-87456-8   | Stamped PN   |

Please refer to the product catalog for available position sizes



| Accessories | Type               | Part Number | Description     |
|-------------|--------------------|-------------|-----------------|
| MOD IV, V   | Keying Plugs       | 86286-1     | Contact Plug    |
|             |                    | 87077-2     | Housing Plug    |
|             | Strain Relief Tabs | 87921-1     | 10-18 Positions |
|             |                    | 87710-1     | >20 Positions   |

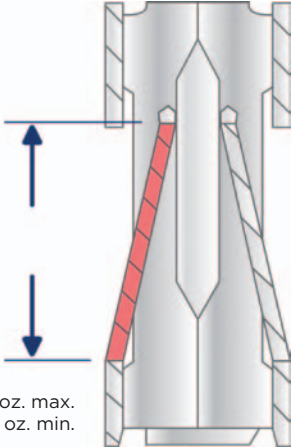


Mod IV, V Contacts

| Contact Style                             | Wire Size | Plating | Part Number | Pack Type   |
|-------------------------------------------|-----------|---------|-------------|-------------|
| MOD IV Receptacle Contacts (Std Pressure) | 32-27 AWG | 30 Au   | 5-102316-8  | Strip Form  |
|                                           |           | 15 AU   | 6-102316-3  | Loose Piece |
|                                           |           | Tin     | 102316-5    | Strip Form  |
|                                           | 26-22 AWG | 30 Au   | 6-87756-7   | Strip Form  |
|                                           |           | 15 AU   | 6-87756-6   | Loose Piece |
|                                           |           | Tin     | 87756-6     | Strip Form  |
|                                           | 24-20 AWG | 30 Au   | 6-87523-9   | Loose Piece |
|                                           |           | 15 AU   | 2-87523-3   | Strip Form  |
|                                           |           | Tin     | 87523-6     | Loose Piece |

Please refer to the product catalog for available plating

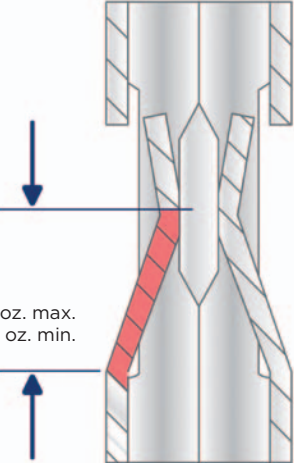
Mating force: 9.0 oz. max.  
Unmating force: 1.5 oz. min.

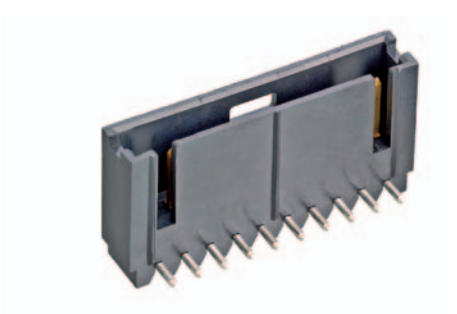


| Contact Style                             | Wire Size | Plating | Part Number | Pack Type   |
|-------------------------------------------|-----------|---------|-------------|-------------|
| MOD V Receptacle Contacts (High Pressure) | 32-27 AWG | 30 Au   | 103455-1    | Strip Form  |
|                                           |           | 30 Au   | 103455-2    | Loose Piece |
|                                           | 26-22 AWG | 30 Au   | 87809-1     | Strip Form  |
|                                           |           | Tin     | 102128-2    | Loose Piece |
|                                           | 24-20 AWG | 30 Au   | 1-87309-4   | Loose Piece |
|                                           |           | Tin     | 87309-8     | Strip Form  |

Please refer to the product catalog for available plating

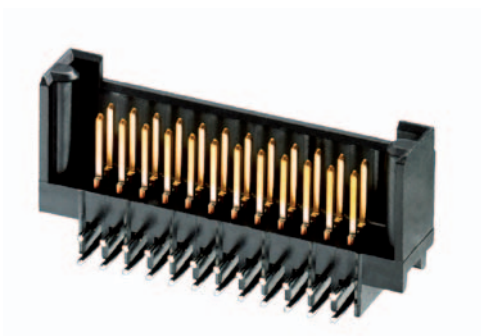
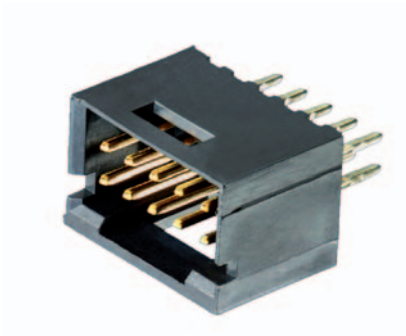
Mating force: 20.0 oz. max.  
Unmating force: 3.0 oz. min.





| Row Type   | Header Style | No. of Positions | Part Number | Packaging |
|------------|--------------|------------------|-------------|-----------|
| Single Row | Vertical     | 3                | 5-103414-1  | Tube      |
|            |              | 13               | 6-103414-1  | Tube      |
|            |              | 25               | 7-103414-3  | Tube      |
|            | Right Angle  | 3                | 5-103361-1  | Tube      |
|            |              | 13               | 6-103361-1  | Tube      |
|            |              | 25               | 7-103361-3  | Tube      |

Please refer to the product catalog for available plating and position sizes



| Row Type   | Header Style | No. of Positions | Part Number | Features                 |
|------------|--------------|------------------|-------------|--------------------------|
| Double Row | Vertical     | 6                | 5-103168-1  | Detent Windows           |
|            |              | 30               | 6-103168-3  | Detent Windows           |
|            |              | 6                | 5-104317-1  | Plastic Holdowns         |
|            |              | 30               | 6-104317-4  | Plastic Holdowns         |
|            |              | 10               | 87474-1     | Mounting Ears            |
|            |              | 60               | 2-87474-6   | Mounting Ears            |
|            |              | 10               | 87608-1     | Mounting Ears (Bulkhead) |
|            |              | 60               | 2-87608-6   | Mounting Ears (Bulkhead) |
|            |              | 6                | 5-102699-2  | Action Pin               |
|            |              | 60               | 7-102699-8  | Action Pin               |
|            | Right Angle  | 6                | 5-103166-1  | Detent Windows           |
|            |              | 30               | 6-103166-3  | Detent Windows           |
|            |              | 6                | 5-103164-1  | 3 Sided Shroud           |
|            |              | 60               | 7-103164-8  | 3 Sided Shroud           |
|            |              | 10               | 5-104319-7  | Plastic Holdowns         |
|            |              | 48               | 5-104319-9  | Plastic Holdowns         |

Please refer to the product catalog for available plating and position sizes



| Header Style   | Row Type   | No. of Positions | Part Number | Pin Type        |
|----------------|------------|------------------|-------------|-----------------|
| Vertical Mount | Single Row | 1                | 5-146285-1  | Solder Pin      |
|                |            | 3                | 5-146297-3  | Board Retention |
|                |            | 40               | 9-146285-0  | Solder Pin      |
|                | Double Row | 2                | 5-146261-1  | Solder Pin      |
|                |            | 80               | 9-146261-0  | Solder Pin      |
|                |            | 80               | 9-146273-0  | Board Retention |

Please refer to the product catalog for available plating and position sizes



| Header Style | Row Type   | No. of Positions | Part Number | Pin Type        |
|--------------|------------|------------------|-------------|-----------------|
| Right Angle  | Single Row | 1                | 5-146304-1  | Solder Pin      |
|              |            | 3                | 5-146306-3  | Board Retention |
|              |            | 40               | 9-146304-0  | Solder Pin      |
|              | Double Row | 2                | 5-146308-1  | Solder Pin      |
|              |            | 80               | 9-146308-0  | Solder Pin      |
|              |            | 80               | 9-146310-0  | Board Retention |

Please refer to the product catalog for available plating and position sizes



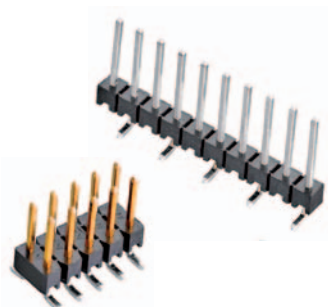
| Header Style | Row Type   | No. of Positions | Part Number | Plating |
|--------------|------------|------------------|-------------|---------|
| Stacked      | Single Row | 1                | 5-146455-1  | Tin     |
|              |            | 16               | 6-146455-6  | Tin     |
|              |            | 40               | 9-146467-0  | 15 Au   |
|              | Double Row | 2                | 5-146483-1  | Tin     |
|              |            | 32               | 6-146483-6  | Tin     |
|              |            | 80               | 9-146495-0  | 15 Au   |

Please refer to the product catalog for available plating and position sizes



| Header Style  | Row Type   | No. of Positions | Part Number | Packaging           |
|---------------|------------|------------------|-------------|---------------------|
| Surface Mount | Single Row | 3                | 5-147118-1  | Tape/Reel Packaging |
|               |            | 9                | 5-146128-7  | Tube                |
|               |            | 15               | 6-146128-3  | Tube                |
|               | Double Row | 4                | 5-146130-1  | Tube                |
|               |            | 10               | 5-147279-2  | Tape/Reel Packaging |
|               |            | 30               | 6-146130-4  | Tube                |

Please refer to the product catalog for available plating and position sizes



## Reeled Breakaway Headers

| Header Style | Row Type   | Plating | Part Number | Packaging |
|--------------|------------|---------|-------------|-----------|
| Reeled       | Single Row | Tin     | 5-146852-1  | Reel      |
|              |            | 15 Au   | 5-146860-1  | Reel      |
|              |            | 30 Au   | 5-146870-1  | Reel      |
|              | Double Row | Tin     | 5-146853-1  | Reel      |
|              |            | 15 Au   | 5-146861-1  | Reel      |
|              |            | 30 Au   | 5-146871-1  | Reel      |

Please refer to the product catalog for available plating and position sizes



## Questions that will help you better select the product that you need:

### What is the available space?

- 0.100 Centerline spacing for single row.
- 0.100 inch x 0.100 inch (between rows) Centerline spacing for double row.

### What is the Current rating (amp) requirement?

3.0 amp maximum for a single, contact in free air,  
222 V (operating voltage) – Board Mounted Connector.

### What wire size requirements are there?

32 AWG to 20 AWG wire can be used

### What is the number of positions that are required?

- 1 through 36 positions for single row.
- 2 through 72 positions for double row.

Other position sizes available, please refer to the product catalog.

### What configuration/orientation is required?

Single/Double Row: Vertical/Right Angle:  
Through hole/Surface mount.\*

\*Surface mount not available as a right angle configuration

### What is the operating temperature requirements?

-65° C to 105° C Range.

### What are the environmental considerations?

Refer to TE Product Specifications 108-25007  
(MOD V. High Pressure), and 108-25020  
(MOD IV. Std. Pressure).

## FOR MORE INFORMATION

### TE Technical Support Center

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| Latin/S. America: | +54 (0) 11-4733-2200  |
| Germany:          | +49 (0) 6251-133-1999 |
| UK:               | +44 (0) 800-267666    |
| France:           | +33 (0) 1-3420-8686   |
| Netherlands:      | +31 (0) 73-6246-999   |
| China:            | +86 (0) 400-820-6015  |

Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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