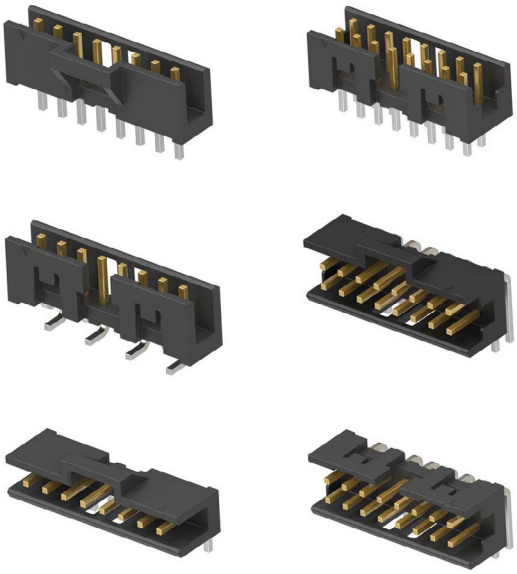


# AMPMODU 2 mm SHROUDED HEADERS

TE Connectivity's (TE) AMPMODU 2 mm Shrouded Headers can be used in a wide range of applications requiring a reliable signal transfer. Our shrouded headers come in a single and double row configurations, and are available in vertical and right-angle orientations. Options include both through-hole and surface mount terminations. These 2 mm headers occupy 38 percent less space on a PCB than the standard 2.54 mm [0.100"] centerline, allowing customers to build more functionality onto their boards. Housings are molded in a high-temp thermoplastic that is resistant to reflow soldering temperatures. For applications requiring latching, customers can select headers with detent latches or a positive latch. Our headers are available in variants suitable for automated surface mounting, through-hole-reflow and traditional through-hole mounting onto boards, enabling customers to choose from a wide range of options for PCB assembly.

## KEY BENEFITS

- 38% space saving on a PCB board compared to 2.54 mm [0.100"] centerline, allowing for extended functionality
- Polarization feature supports correct mating
- Efficient and cost-effective application on boards with automated surface mounting and through-hole-reflow manufacturing
- Detent and positive latches supports secure mating in vibration environments
- Intermateable solution with other major brand receptacles

# AMPMODU 2 mm SHROUDED HEADERS

## APPLICATIONS

- PLC / IO devices
- Servo drives
- Material handling equipment
- Building and home automation
- Industrial controls
- Robotics
- Instrumentation and test equipment

## ELECTRICAL

- **Current Rating:** 2A (max.)
- **Dielectric Withstanding Voltage:** 650 VAC
- **Operating Voltage:** 125VDC or 125VAC RMS

## MECHANICAL

- **Operating Temperature:** -40°C to 105°C (tin plated)
  -40°C to 125°C (gold plated)
- **Solderability:** Reflow capable up to 260°C
- **Vibration:** No electrical discontinuity greater than 1 microsecond

## MATERIALS

- **Plating:** 30 µ" [0.76 µm] gold
  15 µ" [0.38 µm] gold
  4 µ" [0.1 µm] gold flash
  Tin
- **Contact Material:** Phosphor bronze
- **Housing Material:** High-temperature plastic (LCP), black
- **Environmental:** UL94 V0, low halogen
  Operating environment class III

## SPECIFICATIONS

- **Product Specification:** 108-64040
- **Application Specification:** 114-64040
- **RoHS & REACH compliant**
- **UL approval pending**
- **VDE Approval**

# AMPMODU 2 mm SHROUDED HEADERS

## SMART PART NUMBER DEFINITION

### 1) HEADERS WITH DETENT LATCHES

**2MM - HSD - _ _ - _ - _ - _ - _**

**PRODUCT SERIES** (1)

| | |
|---|---|
| **2MM** | AMPMODU 2 mm series |

**GENDER / TYPE** (2)

| | |
|---|---|
| **HSD** | Shrouded headers with detent latches |

**NUMBER OF ROWS** (3)

| | |
|---|---|
| **S** | Single row |
| **D** | Double row |

**NUMBER OF PINS PER ROW** (4)

| | |
|---|---|
| **##** | 02 thru 25 (enter two digits)<br>• Single row: 02 thru 16<br>• Double row: 02 thru 16, 20, 22, 25 per row |

**ORIENTATION & TERMINATION** (5)

| | |
|---|---|
| **VT** | Vertical through hole |
| **VS** | Vertical surface mount |
| **HT** | Horizontal through hole |

**see table DESIGN NAVIGATOR for guidance*

**TAIL LENGTH** (6)

| | |
|---|---|
| **00** | N/A for surface mount |
| **01** | 0.087“ [2.2 mm] |
| **02** | 0.110“ [2.8 mm] |

**select allowable Tail Length from table DESIGN NAVIGATOR*

**PLATING** (7)

| | |
|---|---|
| **T** | Tin |
| **F** | 4 µ" [0.1 µm] Gold (gold flash) |
| **M** | 15 µ" [0.38 µm] Gold |
| **H** | 30 µ" [0.76 µm] Gold |

**PACKAGING** (8)

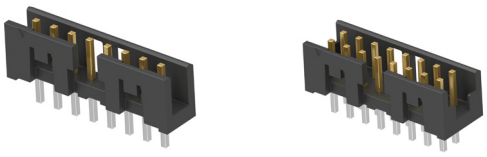
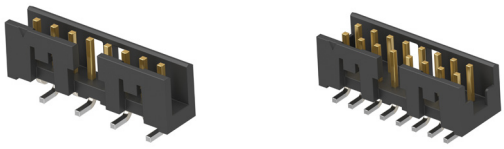
| | |
|---|---|
| **TB** | Tube without cap |
| **TBP** | Tube with cap (N/A for 2 positions per row) |
| **TRP** | Tape and reel with cap (N/A for 2 positions per row for horizontal through hole) |

**select allowable Packaging from table DESIGN NAVIGATOR*

**SMART PN EXAMPLES**

- AMPMODU 2 mm, shrouded header with detent latches, single row, 8 positions (1 x 8),horizontal through hole, 2.8 mm tail length, 15µ" [0.38µm] gold, tube without cap: **2MM-HSD-S08-HT-02-M-TB**

## DESIGN NAVIGATOR

| Orientation & Termination | | Tail Length | | Packaging |
|---|---|---|---|---|
| VT |  | 01 | 0.087“ [2.2 mm] | TB |
| | | | | TBP |
| | | | | TRP |
| | | 02 | 0.110“ [2.8 mm] | TB |
| | | | | TBP |
| | | | | TRP |
| VS |  | 00 | - | TRP |
| | | | | TBP |
| HT |  | 01 | 0.087“ [2.2 mm] | TB |
| | | | | TBP |
| | | | | TRP |
| | | 02 | 0.110“ [2.8 mm] | TB |
| | | | | TBP |
| | | | | TRP |

# AMPMODU 2 mm SHROUDED HEADERS

## 2) HEADERS WITH POSITIVE LATCH

**2MM - HSP - _ _ - _ - _ - _ - _**

### PRODUCT SERIES (1)

| | |
|---|---|
| **2MM** | AMPMODU 2 mm series |

### GENDER / TYPE (2)

| | |
|---|---|
| **HSP** | Shrouded headers with positive latch |

### NUMBER OF ROWS (3)

| | |
|---|---|
| **S** | Single row |
| **D** | Double row |

### NUMBER OF PINS PER ROW (4)

| | |
|---|---|
| **##** | 03 thru 16 per row (enter two digits) |

### ORIENTATION & TERMINATION (5)

| | |
|---|---|
| **VT** | Vertical through hole |
| **VS** | Vertical surface mount |
| **HT** | Horizontal through hole |

**see table DESIGN NAVIGATOR for guidance*

### TAIL LENGTH (6)

| | |
|---|---|
| **00** | N/A for surface mount |
| **01** | 0.087“ [2.2 mm] |
| **02** | 0.110“ [2.8 mm] |

**select allowable Tail Length from table DESIGN NAVIGATOR*

### PLATING (7)

| | |
|---|---|
| **T** | Tin |
| **M** | 15 µ” [0.38 µm] Gold |
| **H** | 30 µ” [0.76 µm] Gold |

### PACKAGING (8)

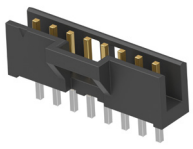
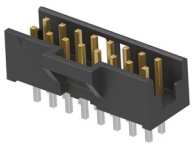
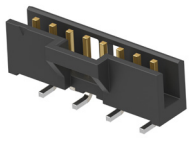
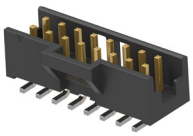
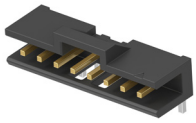
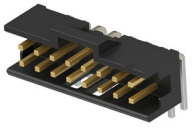
| | |
|---|---|
| **TB** | Tube without cap |
| **TBP** | Tube with cap |
| **TR** | Tape and reel without cap |
| **TRP** | Tape and reel with cap |

**select allowable Packaging from table DESIGN NAVIGATOR*

SMART PN EXAMPLES

- AMPMODU 2 mm, shrouded header with positive latch, double row, 16 positions (2 x 8), vertical through hole, 2.2 mm tail length, 30µ” [0.76µm] gold, tube without cap: **2MM-HSP-D08-VT-01-H-TB**

## DESIGN NAVIGATOR

| Orientation & Termination | | Tail Length | | Packaging |
|---|---|---|---|---|
| VT |   | 01 | 0.087“ [2.2 mm] | TB |
| | | | | TBP |
| | | | | TRP |
| | | 02 | 0.110“ [2.8 mm] | TB |
| | | | | TBP |
| | | | | TRP |
| VS |   | 00 | - | TRP |
| | | | | TBP |
| HT |   | 01 | 0.087“ [2.2 mm] | TB |
| | | | | TR |
| | | 02 | 0.110“ [2.8 mm] | TB |
| | | | | TR |

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08/23 VL

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