

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

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

GENDER / TYPE

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

NUMBER OF ROWS

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

NUMBER OF PINS PER ROW

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

ORIENTATION & TERMINATION

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

PACKAGING

| | |
|-----|---|
| 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*

PLATING

| | |
|---|---------------------------------|
| 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 |

TAIL LENGTH

| | |
|----|-----------------------|
| 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*

1

2

3

4

5

6

7

8

**see table DESIGN NAVIGATOR for guidance*

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 |

INDUSTRIAL / AMPMODU 2 mm SHROUDED HEADERS

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AMPMODU 2 mm SHROUDED HEADERS

2) HEADERS WITH POSITIVE LATCH

PRODUCT SERIES

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

GENDER / TYPE

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

NUMBER OF ROWS

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

NUMBER OF PINS PER ROW

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

ORIENTATION & TERMINATION

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

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

PACKAGING

| | |
|------------|---------------------------|
| 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*

PLATING

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

TAIL LENGTH

| | |
|-----------|-----------------------|
| 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*

**see table DESIGN NAVIGATOR for guidance*

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 |
| VS |  | 00 | - | TBP |
| | | | | TRP |
| | | | | TRP |
| | | 01 | 0.087" [2.2 mm] | TB |
| HT |  | 01 | 0.087" [2.2 mm] | TR |
| | | | | TB |
| | | | | TR |
| | | 02 | 0.110" [2.8 mm] | TB |

AMPMODU 2 mm SHROUDED HEADERS

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[2MM-HSD-D20-HT-02-T-TB](#)