

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 | 1 |
|------------|---------------------|---|

GENDER / TYPE

| | | |
|------------|--------------------------------------|---|
| HSD | Shrouded headers with detent latches | 2 |
|------------|--------------------------------------|---|

NUMBER OF ROWS

| | | |
|----------|------------|---|
| S | Single row | 3 |
| 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 | 4 |
|-----------|---|---|

ORIENTATION & TERMINATION

| | | |
|-----------|-------------------------|---|
| VT | Vertical through hole | 5 |
| VS | Vertical surface mount | |
| HT | Horizontal through hole | |

*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

PACKAGING

| | | |
|------------|---|---|
| TB | Tube without cap | 8 |
| 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 | 7 |
| 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 | 6 |
| 01 | 0.087" [2.2 mm] | |
| 02 | 0.110" [2.8 mm] | |

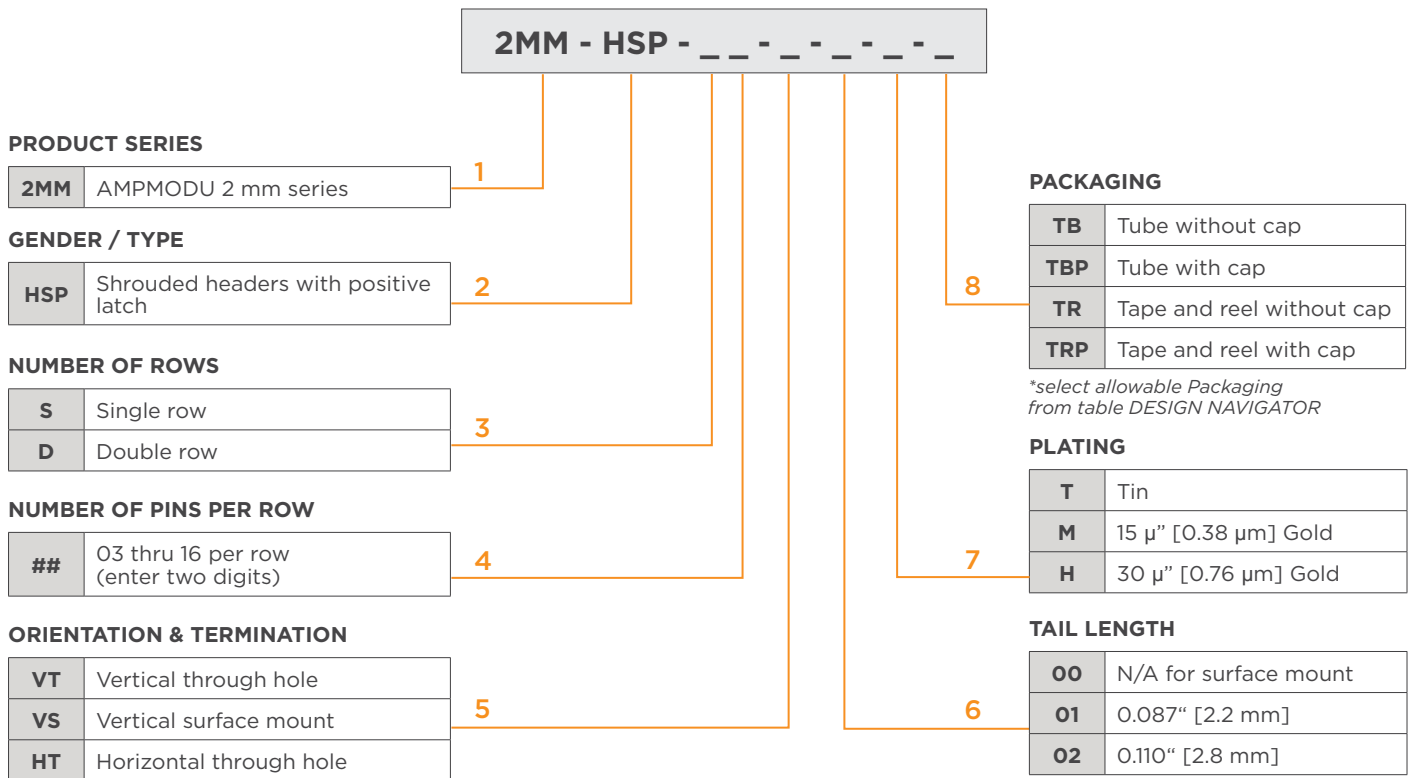
*select allowable Tail Length from table DESIGN NAVIGATOR

DESIGN NAVIGATOR

| Orientation & Termination | | Tail Length | | Packaging |
|---------------------------|--|-------------|-----------------|-----------|
| VT | | 01 | 0.087" [2.2 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 |

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2) HEADERS WITH POSITIVE LATCH



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

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[2MM-HSP-D03-VS-00-T-TRP](#)