



# 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  $\mu$ " [0.38  $\mu$ m] gold
  - $4 \mu$ " [0.1  $\mu$ m] gold flash
  - Tin
- Contact Material: Phosphor bronze
- Housing Material: High-temperature plastic (LCP), black
- Environmental: UL94 VO, 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

., ,	DERS WITH DETENT LATCHES			_		
		2MM - HSD				
PRODUCT SERIES				PACKAGING		
2MM	AMPMODU 2 mm series	_1	8	ТВ	Tube without cap	
GENDER / TYPE				ТВР	Tube with cap (N/A for 2 positions per row)	
HSD	Shrouded headers with detent latches	2		TRP	Tape and reel with cap (N/A for 2 positions per row for horizontal through hole)	
NUMBER OF ROWS  S Single row		3		*select allowable Packaging from table DESIGN NAVIGATOR		
D	Double row			PLATING		
NUMBER OF PINS PER ROW				Т	Tin	
	02 thru 25 (enter two digits)	4	7	F	4 μ" [0.1 μm] Gold (gold flash)	
##	Single row: 02 thru 16			М	15 μ" [0.38 μm] Gold	
	• Double row: 02 thru 16, 20, 22, 25 per row			Н	30 μ" [0.76 μm] Gold	
ORIENTATION & TERMINATION				TAIL LENGTH		
VT	Vertical through hole			00	N/A for surface mount	
VS	Vertical surface mount	5	6	01	0.087" [2.2 mm]	
нт	Horizontal through hole			02	0.110" [2.8 mm]	

<sup>\*</sup>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

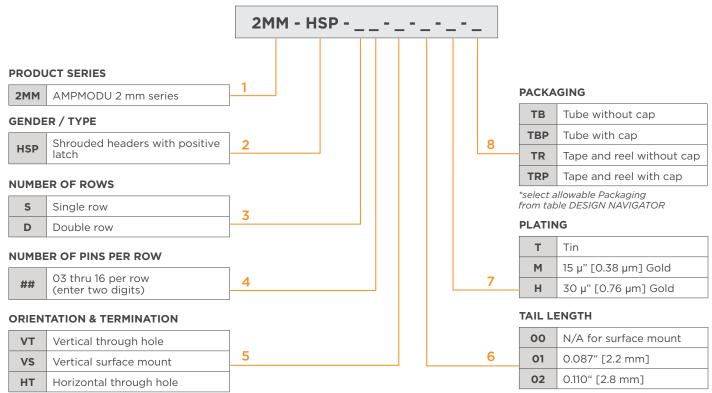
## **DESIGN NAVIGATOR**

	Orientation & Terminat	ion		Tail Length	Packaging
		A CONTRACTOR		0.087" [2.2 mm]	TB
			01		TBP
VT					TRP
VT			02	0.110" [2.8 mm]	ТВ
					TBP
					TRP
VG		amm.	00	-	TRP
VS					TBP
	See Miller	Tellient)	01	0.087" [2.2 mm]	TB
					TBP
UT					TRP
HT			02	0.110" [2.8 mm]	ТВ
					TBP
					TRP

\*select allowable Tail Length from table

DESIGN NAVIGATOR

### 2) HEADERS WITH POSITIVE LATCH



<sup>\*</sup>see table DESIGN NAVIGATOR for guidance

\*select allowable Tail Length 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
		01	0.087" [2.2 mm]	ТВ
				ТВР
VT				TRP
VI		02	0.110" [2.8 mm]	ТВ
				TBP
				TRP
VS		00	-	TRP
VS	The state of the s			TBP
		01	0.087" [2.2 mm]	ТВ
				TR
HT	Ellen Ellen	02	0.110" [2.8 mm]	ТВ
				TR

# **AMPMODU 2 mm SHROUDED HEADERS**

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08/23 VI



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TE Connectivity: 2MM-HSD-D20-VT-02-F-TB