

# AMPMODU 2 mm INTERCONNECTION SYSTEM

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Quick Reference Guide

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# AMPMODU 2 mm INTERCONNECTION SYSTEM

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TE Connectivity (TE)'s AMPMODU 2 mm interconnection system reliably and economically meets the requirements of today's miniature, sophisticated electronics. This system is ideal for space constrained environments and offers a wide portfolio with design features that enable reliable signal transfers in demanding applications.

TE's compact 2 mm design enables space savings, providing designers with greater overall flexibility.

The AMPMODU 2 mm system occupies 38% less space on a printed circuit board as compared to traditional 2.54 mm centerline connectors. This connector system is available in both board-to-board and wire-to-board mating options and utilizes a dual-beam contact design to enable 2 points of contact for increased signal reliability.

The AMPMODU 2 mm connection system is available in 4 types of plating options: 30µ" [0.76 µm] gold, 15µ" [0.38 µm] gold, 4µ" [0.1 µm] gold flash, and tin. All 2 mm board-mount connectors are offered in single and double row versions and vertical and horizontal orientations for both headers and receptacles. Surface mount and through-hole mounting options are available with the capability to support reflow solder processes up to 260°C.

Board-mount connectors can be packaged in tape and reel to support automated assembly processes, or in tubes, which may be ideal in manual assembly environments. AMPMODU 2 mm wire-to-board connectors are available without latches, and with detent or positive latches for high-vibrations applications that demand more secure electrical connections. Wire-mount receptacles are offered with two options for discrete wire termination - crimp snap-in contacts and insulation displacement contacts (IDC). Additionally, wire termination is easily accomplished with TE-designed application tooling.

The AMPMODU 2 mm interconnection system is the clear choice for demanding Industrial applications, offering a comprehensive, economical, and reliable connector portfolio.

## FEATURES

- Centerline: 0.079" [2 mm]
- 0.020" [0.50 mm] square pins for headers
- Dual-beam receptacle contact
- Multiple solder tail lengths for various PCB thicknesses, 0.063" to 0.094" [1.6 mm to 2.4 mm]
- High temperature plastic (LCP) housing
- Board connectors available in tube and tape & reel packaging
- Up to 25 positions per row, single and dual row offering
- Wire termination: crimp and IDC
- Wire size:
  - Crimp contacts: AWG 30 - 24
  - IDC: AWG 30 - 26
- Environmental: UL94V0, low halogen

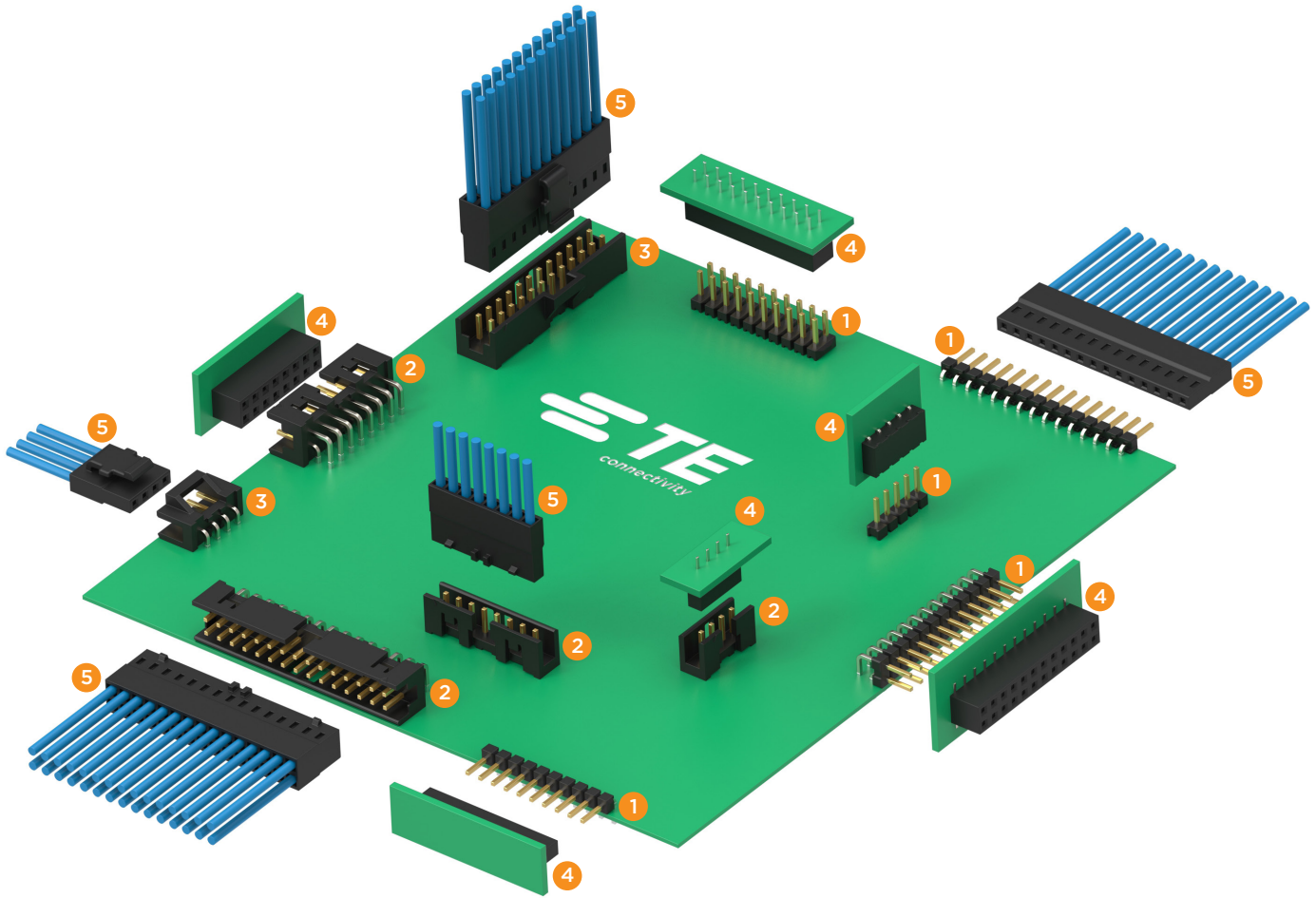
## APPLICATIONS

- PLC
- I/O devices
- Servo drives
- Robotics
- Automated guided vehicles
- Material handling equipment
- Industrial controls
- Instrumentation and test equipment
- Building automation devices
- Medical equipment
- Energy storage systems

## BENEFITS

- Occupies 38% less space on PCB board compared with 0.100" [2.54 mm] centerline
- Two-point electrical stability for reliable signal transfer
- Multiple options for Board-to-Board stacking by various header and receptacle combinations
- Ease of assembly with automated surface-mounting and through-hole reflow manufacturing
- Reliable connection in high vibration environments with detent and positive latching variants
- Ergonomic and easy mating/unmating process with positive latching variant
- Headers are intermateable with other major brand receptacles
- Design flexibility with various crimp terminal options
- Fast termination/installation without the need to strip the wire with IDC wire receptacles
- IDC and crimp receptacles mate with the same headers
- Interchangeable IDC and Crimp Snap-In contacts allow for easy replacement of damaged/faulty contacts

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# AMPMODU 2 mm INTERCONNECTION SYSTEM

## AMPMODU 2 mm INTERCONNECTION SYSTEM PERFORMANCE SPECIFICATIONS AND STANDARDS

### MATERIALS

Housing	Liquid Crystal Polymer, UL 94V0, Black
Contact	Phosphor Bronze
Contact Plating	30μ" [0.76 μm] Gold
	15μ" [0.38 μm] Gold
	4μ" [0.1 μm] Gold
	Tin

### ELECTRICAL

Voltage Rating	125 Vrms (max.)
Current Rating	2 A (max.)
Operating Temperature	Tin Plating: -40 to +105°C
	Gold Plating: -40 to +125°C
Dielectric Withstanding Voltage	650 VAC
Temperature Rise	30°C@1.6A

### SPECIFICATIONS AND APPROVALS

Certifications and Approvals	RoHS
	REACH
	cURus
Product Specification	Headers: <b><u>108-64040</u></b>
	Board Receptacles: <b><u>108-64040</u></b>
	Crimp Snap-In Receptacles: <b><u>108-64040-1</u></b>
	IDC Receptacles: <b><u>108-64040-2</u></b>
Application Specification	Headers: <b><u>114-64040</u></b>
	Board Receptacles: <b><u>114-32186</u></b>
	Crimp Snap-In Receptacles: <b><u>114-32173</u></b>
	IDC Receptacles: <b><u>114-32175</u></b>

### MECHANICAL

Durability	30μ" [0.76 μm] Gold: 250 cycles
	15μ" [0.38 μm] Gold: 100 cycles
	4μ" [0.1 μm] Gold: 50 cycles
	Tin: 25 cycles
Connector Mating/Unmating Force	Mating: 2.2 N max.
	Unmating: 0.2 N min.
Contact Retention Force in Housing (Board Connectors)	5 N min.
Contact Retention Force in Housing (Wire Receptacles)	10 N min.
Vibration	No electrical discontinuity greater than 1 microsecond under 10-55-10 Hz traversed in minute at 1.52 mm amplitude
Shock	No electrical discontinuity greater than 1 microsecond by 50 G acceleration
Latch Durability	25 cycles
Positive Latch Engage/Disengage Force (without Contacts)	Engage: 6 N max.
	Disengage: 20 N min.
Solderability	Reflow Solderable, Capable up to 260°C

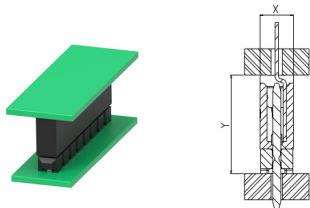
# AMPMODU 2 mm INTERCONNECTION SYSTEM

## CONFIGURATIONS

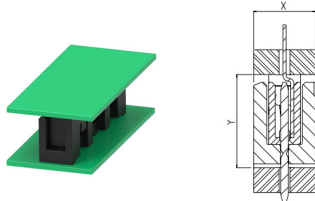
Headers		
<b>A</b> BREAKAWAY VERTICAL TH	<b>B</b> BREAKAWAY VERTICAL SMT	<b>C</b> BREAKAWAY HORIZONTAL TH
<b>D</b> SHROUDED W/ DETENT LATCHES VERTICAL TH	<b>E</b> SHROUDED W/ DETENT LATCHES VERTICAL SMT	<b>F</b> SHROUDED W/ DETENT LATCHES HORIZONTAL TH
<b>G</b> SHROUDED W/ POSITIVE LATCH VERTICAL TH	<b>H</b> SHROUDED W/ POSITIVE LATCH VERTICAL SMT	<b>J</b> SHROUDED W/ POSITIVE LATCH HORIZONTAL TH

Receptacles			
<b>1</b> BOARD VERTICAL TH	<b>2</b> BOARD VERTICAL SMT	<b>3</b> BOARD HORIZONTAL TH	<b>4</b> BOARD HORIZONTAL SMT
<b>5</b> WIRE (CRIMP/IDC) STANDARD	<b>6</b> WIRE (CRIMP/IDC) W/ DETENT LATCHES	<b>7</b> WIRE (CRIMP/IDC) W/ POSITIVE LATCH	

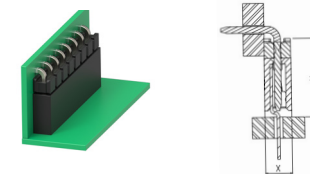
## BOARD-TO-BOARD



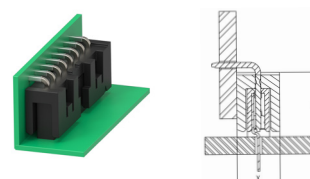
Application		X (Single row)	X (Double row)	Y
Parallel boards - vertical board receptacle and vertical shrouded header	<b>A 1</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.236" [6.00 mm]
	<b>B 1</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.285" [7.25 mm]
	<b>A 2</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.244" [6.20 mm]
	<b>B 2</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.293" [7.45 mm]



Application		X (Single row)	X (Double row)	Y
Parallel boards - vertical board receptacle and vertical shrouded header	<b>D 1</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.236" [6.00 mm]
	<b>E 1</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.285" [7.25 mm]
	<b>D 2</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.244" [6.20 mm]
	<b>E 2</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.293" [7.45 mm]



Application		X (Single row)	X (Double row)	Y
Perpendicular boards - vertical board receptacle and horizontal breakaway header	<b>C 1</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.236" [6.00 mm]
	<b>C 2</b>	0.083" [2.10 mm]	0.161" [4.10 mm]	0.244" [6.20 mm]

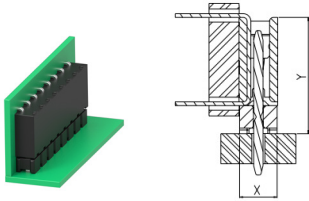


Application		X (Single row)	X (Double row)	Y
Perpendicular boards - vertical board receptacle and horizontal shrouded header	<b>F 1</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.236" [6.00 mm]
	<b>F 2</b>	0.157" [4.00 mm]	0.244" [6.20 mm]	0.244" [6.20 mm]

# AMPMODU 2 mm INTERCONNECTION SYSTEM

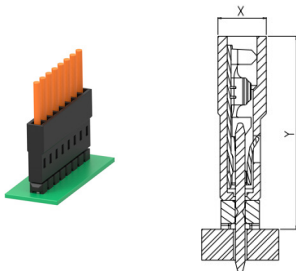
## CONFIGURATIONS - CONTINUED

### BOARD-TO-BOARD

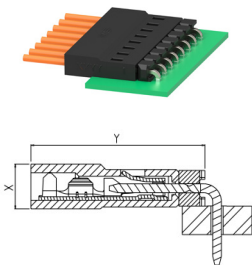


Application		X (Single row)	X (Double row)	Y
Perpendicular boards - horizontal board receptacle and vertical breakaway header	A 3	0.083" [2.10 mm]	0.161" [4.10 mm]	0.244" [6.20 mm]
	B 3	0.083" [2.10 mm]	0.161" [4.10 mm]	0.293" [7.45 mm]
	A 4	0.093" [2.35 mm]	0.172" [4.36 mm]	0.244" [6.20 mm]
	B 4	0.093" [2.35 mm]	0.172" [4.36 mm]	0.293" [7.45 mm]

### WIRE-TO-BOARD



Application		Crimp		IDC	
Application	Row	X	Y	X	Y
		Perpendicular to PCB - non- latching solution - breakaway header and standard wire receptacle (no latches)	Single row	0.099" [2.51 mm]	0.394" [10.00 mm]
Double row	0.185" [4.70 mm]		0.394" [10.00 mm]	-	-
A 5	Single row	0.099" [2.51 mm]	0.443" [11.25 mm]	0.094" [2.4 mm]	0.62" [15.75 mm]
	Double row	0.185" [4.70 mm]	0.443" [11.25 mm]	-	-

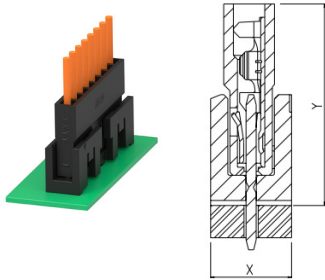


Application		Crimp		IDC	
Application	Row	X	Y	X	Y
		Parallel to PCB - non-latching solution - breakaway header and standard wire receptacle (no latches)	Single row	0.099" [2.51 mm]	0.394" [10.00 mm]
Double row	0.185" [4.70 mm]		0.394" [10.00 mm]	-	-

# AMPMODU 2 mm INTERCONNECTION SYSTEM

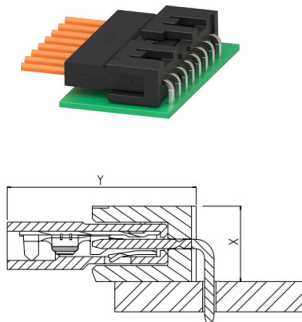
## CONFIGURATIONS - CONTINUED

### WIRE-TO-BOARD



Application	Row	Crimp		IDC	
		X	Y	X	Y
Perpendicular to PCB - non-latching solution - shrouded header with detent latches and standard wire receptacle (no latches)	D 5	0.157" [4.00 mm]	0.394" [10.00 mm]	0.157" [4.00 mm]	0.57" [14.50 mm]
	Double row	0.244" [6.20 mm]	0.394" [10.00 mm]	-	-
E 5	Single row	0.157" [4.00 mm]	0.443" [11.25 mm]	0.157" [4.00 mm]	0.62" [15.75 mm]
	Double row	0.244" [6.20 mm]	0.443" [11.25 mm]	-	-

Application	Row	Crimp		IDC	
		X	Y	X	Y
Perpendicular to PCB - detent latching solutions - shrouded header with detent latches and wire receptacle with detent latches	D 6	0.157" [4.00 mm]	0.394" [10.00 mm]	0.157" [4.00 mm]	.57" [14.50 mm]
	Double row	0.244" [6.20 mm]	0.394" [10.00 mm]	-	-
E 6	Single row	0.157" [4.00 mm]	0.443" [11.25 mm]	0.157" [4.00 mm]	0.62" [15.75 mm]
	Double row	0.244" [6.20 mm]	0.443" [11.25 mm]	-	-



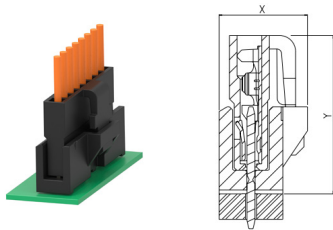
Application	Row	Crimp		IDC	
		X	Y	X	Y
Parallel to PCB - non-latching solution - shrouded header with detent latches and standard wire receptacle (no latches)	F 5	0.157" [4.00 mm]	0.394" [10.00 mm]	0.157" [4.00 mm]	0.57" [14.50 mm]
	Double row	0.244" [6.20 mm]	0.394" [10.00 mm]	-	-

Application	Row	Crimp		IDC	
		X	Y	X	Y
Parallel to PCB - detent latching solution - shrouded header with detent latches and wire receptacle with detent latches	F 6	0.157" [4.00 mm]	0.394" [10.00 mm]	0.157" [4.00 mm]	0.57" [14.50 mm]
	Double row	0.244" [6.20 mm]	0.394" [10.00 mm]	-	-

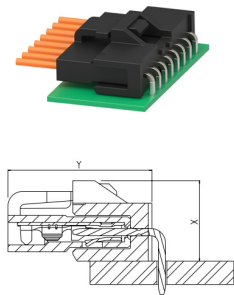
# AMPMODU 2 mm INTERCONNECTION SYSTEM

## CONFIGURATIONS - CONTINUED

### WIRE-TO-BOARD



Application	Row	Crimp		IDC	
		X	Y	X	Y
Perpendicular to PCB - positive latching solution - shrouded header with positive latch wire and wire receptacle with positive latch	Single row	0.218" [5.54 mm]	0.394" [10.00 mm]	0.218" [5.54 mm]	0.57" [14.50 mm]
	Double row	0.305" [7.74 mm]	0.394" [10.00 mm]	-	-
G 7	Single row	0.218" [5.54 mm]	0.443" [11.25 mm]	0.218" [5.54 mm]	0.62" [15.75 mm]
	Double row	0.305" [7.74 mm]	0.443" [11.25 mm]	-	-



Application	Row	Crimp		IDC	
		X	Y	X	Y
Parallel to PCB - positive latching solution - shrouded header with positive latch and wire receptacle with positive latch	Single row	0.218" [5.54 mm]	0.394" [10.00 mm]	0.218" [5.54 mm]	0.57" [14.50 mm]
	Double row	0.305" [7.74 mm]	0.394" [10.00 mm]	-	-
J 7	Single row	0.218" [5.54 mm]	0.394" [10.00 mm]	0.218" [5.54 mm]	0.57" [14.50 mm]
	Double row	0.305" [7.74 mm]	0.394" [10.00 mm]	-	-

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## BREAKAWAY HEADERS

### SMART PART NUMBER DEFINITION



#### PRODUCT SERIES

<b>2MM</b>	AMPMODU 2 mm series
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#### GENDER / TYPE

<b>HB</b>	Breakaway headers
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#### NUMBER OF ROWS

<b>S</b>	Single row
<b>D</b>	Double row

#### NUMBER OF PINS PER ROW

<b>##</b>	02 thru 25 per row (enter two digits)
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#### ORIENTATION & TERMINATION

<b>VT</b>	Vertical through hole
<b>VS</b>	Vertical surface mount
<b>HT</b>	Horizontal through hole

\*see table DESIGN NAVIGATOR for guidance

#### PACKAGING

<b>TB</b>	Tube without cap
<b>TBP</b>	Tube with cap (N/A for 2 and 3 positions per row)
<b>TRP</b>	Tape and reel with cap

\*select allowable Packaging from table DESIGN NAVIGATOR

#### PLATING

<b>T</b>	Tin
<b>F</b>	4μ" [0.1 μm] Gold (gold flash)
<b>M</b>	15μ" [0.38 μm] Gold
<b>H</b>	30μ" [0.76 μm] Gold

#### TAIL LENGTH

<b>00</b>	N/A for surface mount
<b>01</b>	0.087" [2.2 mm]
<b>02</b>	0.110" [2.8 mm]

\*select allowable Tail Length from table DESIGN NAVIGATOR

#### SMART PN EXAMPLES

- AMPMODU 2 mm, breakaway header, double row, 20 positions (2 x 10), vertical surface mount, tail length: N/A, tin, T&R with cap: **2MM-HB-D10-VS-00-T-TRP**

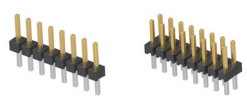
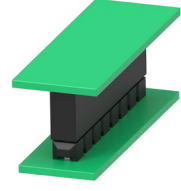

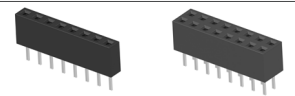
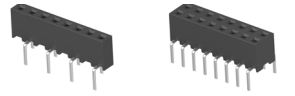
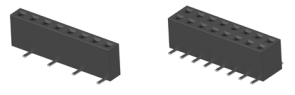

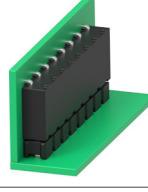
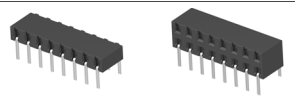
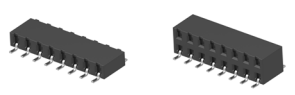
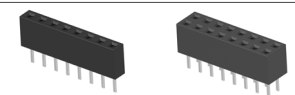
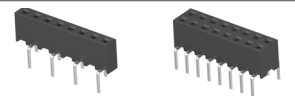
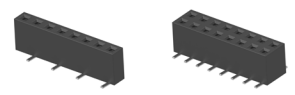
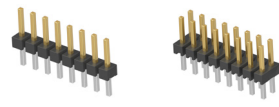
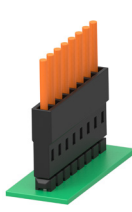
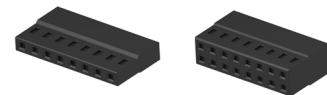
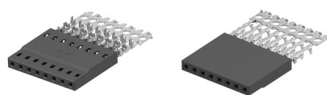



### DESIGN NAVIGATOR

	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
02	0.110" [2.8 mm]	02	0.110" [2.8 mm]	TRP				
				TB				
				TBP				

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## BREAKAWAY HEADERS

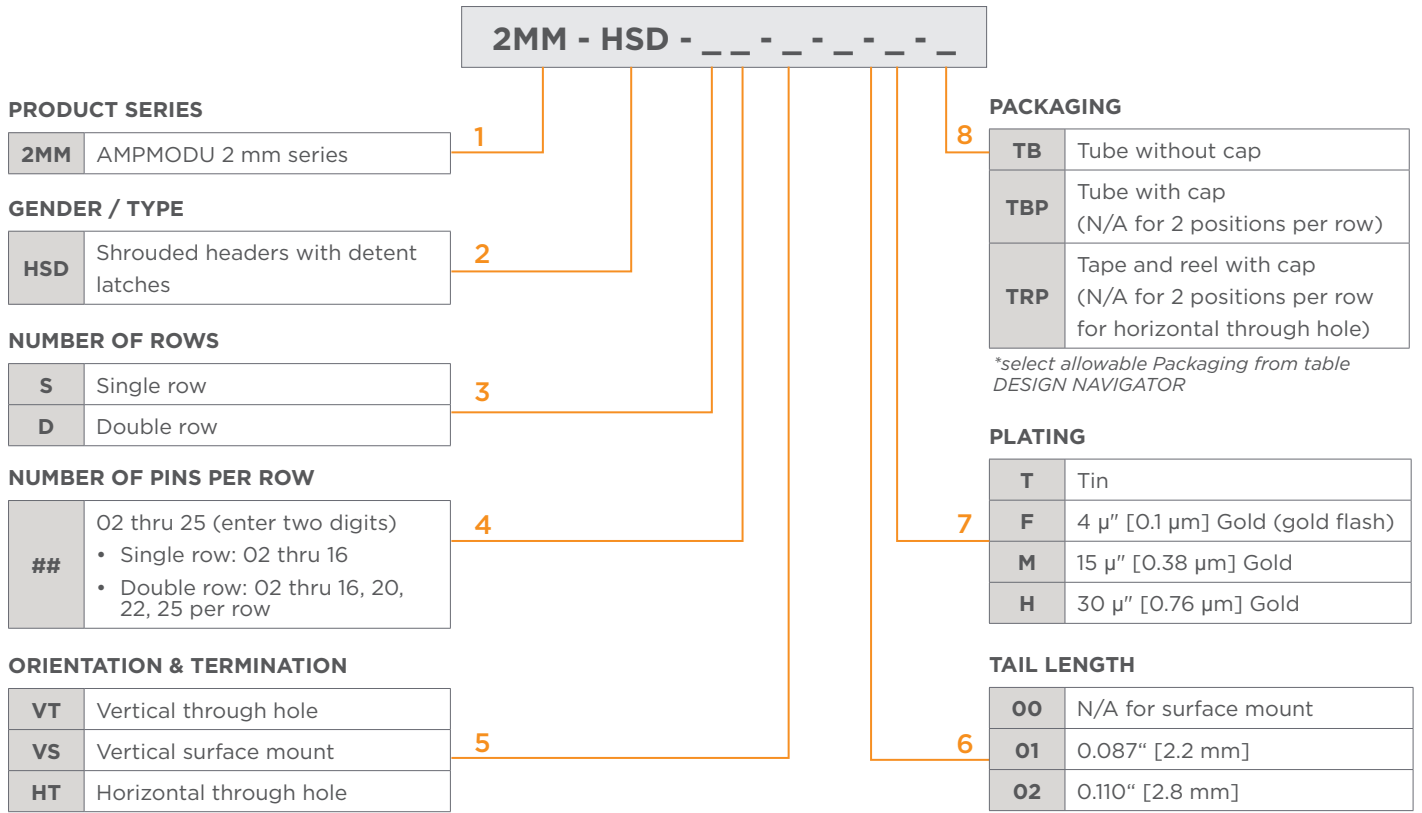
### MATEABLE PARTS

Breakaway Headers	B-t-B Orientation	Mateable Receptacles				
<b>Vertical Orientation</b>  2MM - HB - __ - VT 	Parallel 	<b>Vertical Board Receptacles</b>		<b>Page 15-16</b>		
2MM - HB - __ - VS 		2MM - R - __ - VT 	2MM - R - __ - VTR 	2MM - R - __ - VS 		
		<b>Horizontal Board Receptacles</b>		<b>Page 15-16</b>		
<b>Horizontal Orientation</b>  2MM - HB - __ - HT 	Perpendicular 	2MM - R - __ - HT 	2MM - R - __ - HS 			
		<b>Vertical Board Receptacles</b>		<b>Page 15-16</b>		
		2MM - R - __ - VT 	2MM - R - __ - VTR 	2MM - R - __ - VS 		
Breakaway Headers	W-t-B Orientation	Mateable Receptacles				
<b>Vertical Orientation</b>  2MM - HB - __ - VT 		<b>Crimp Receptacles</b> <b>Page 17-19</b> 2MM - RC - __  Standard (No Latches)	<b>IDC Receptacles</b> <i>Single row Only</i> <b>Page 20-22</b> 2MM - RD- __  Standard (No Latches)			
2MM - HB - __ - VS 						
<b>Horizontal Orientation</b>  2MM - HB - __ - HT 						

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## SHROUDED HEADERS - WITH DETENT LATCHES

### SMART PART NUMBER DEFINITION



\*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**

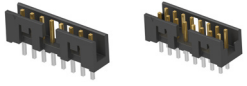
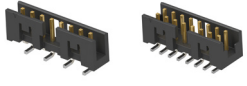
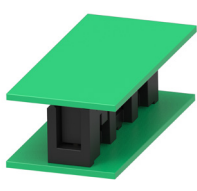
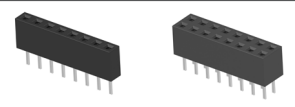
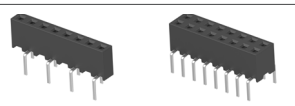
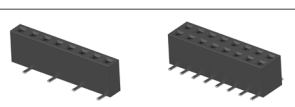
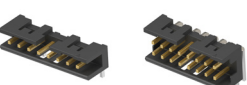
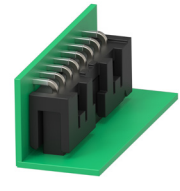
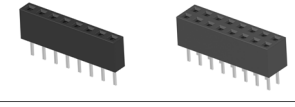
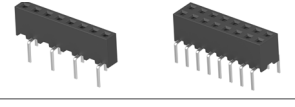
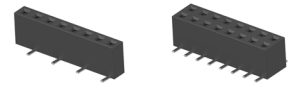
### DESIGN NAVIGATOR

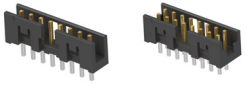
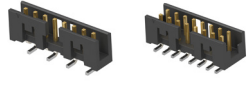
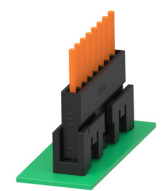
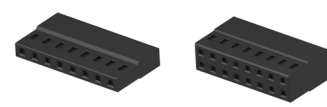
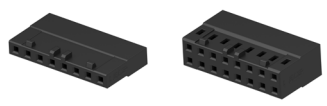
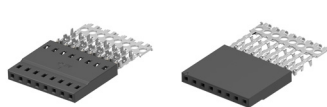
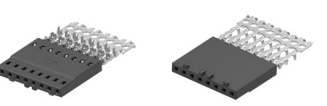
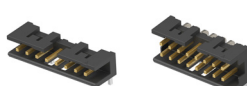
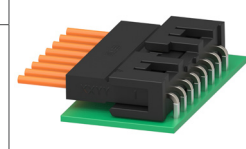
Orientation & Termination		Tail Length		Packaging
VT		01	0.087" [2.2 mm]	TB
				TBP
VS		00	-	TRP
				TBP
HT		01	0.087" [2.2 mm]	TRP
				TB
		02	0.110" [2.8 mm]	TBP
				TRP

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## SHROUDED HEADERS - WITH DETENT LATCHES

### MATEABLE PARTS

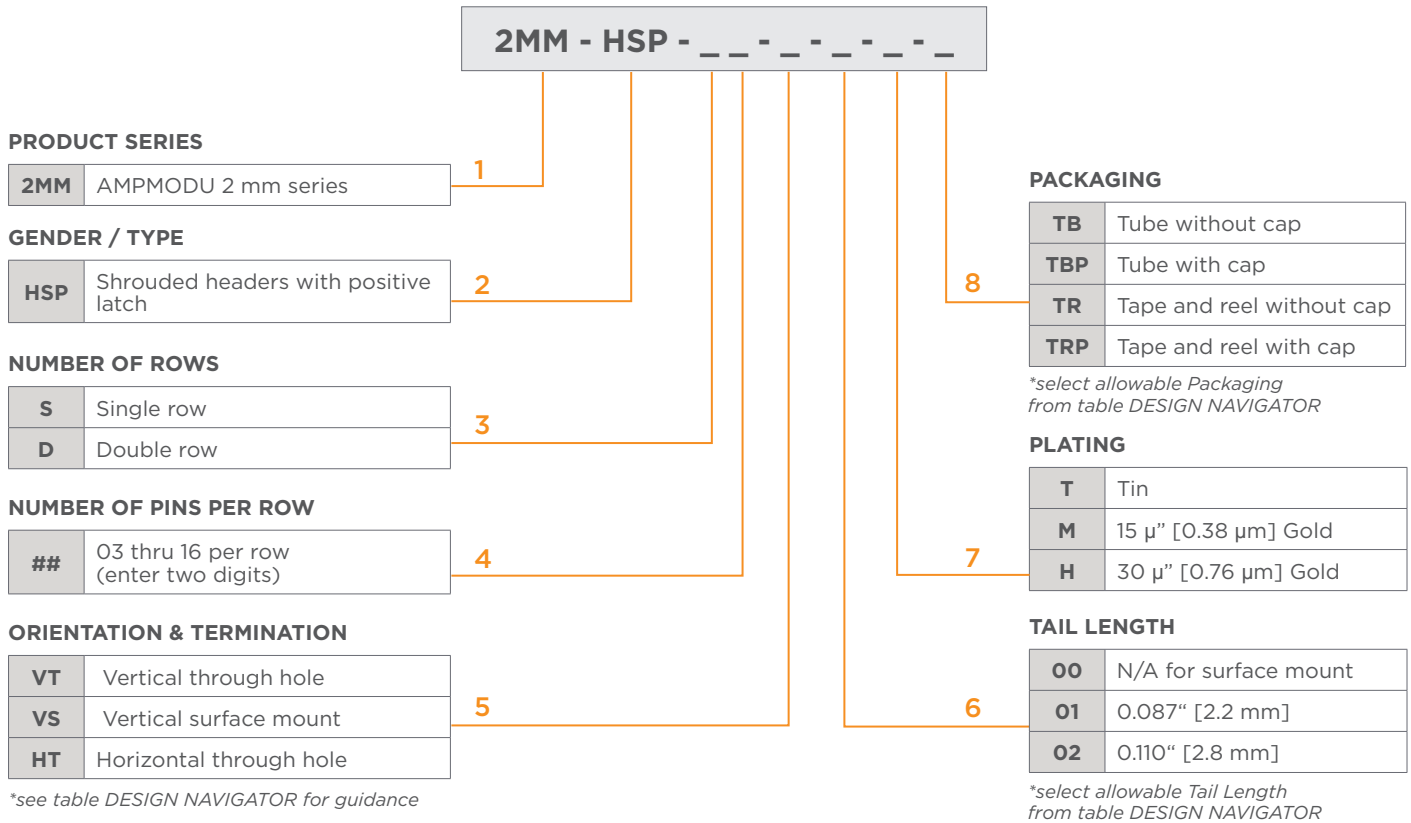
Shrouded Headers w/ Detent Latches	B-t-B Orientation	Mateable Receptacles	
<b>Vertical Orientation</b> 2MM - HSD - __ - VT  2MM - HSD - __ - VS 	Parallel 	<b>Vertical Board Receptacles</b> 2MM - R - __ - VT  2MM - R - __ - VTR  2MM - R - __ - VS 	<b>Page 15-16</b>
<b>Horizontal Orientation</b> 2MM - HSD - __ - HT 	Perpendicular 	<b>Vertical Board Receptacles</b> 2MM - R - __ - VT  2MM - R - __ - VTR  2MM - R - __ - VS 	<b>Page 15-16</b>

Shrouded Headers w/ Detent Latches	W-t-B Orientation	Mateable Receptacles			
<b>Vertical Orientation</b> 2MM - HSD - __ - VT  2MM - HSD - __ - VS 		<b>Crimp Receptacles</b> 2MM - RC - __  Standard (No Latches) 2MM - RCD - __  W/ Detent Latches	<b>Page 17-19</b>	<b>IDC Receptacles</b> <i>Single row Only</i> 2MM - RD- __  Standard (No Latches) 2MM - RDD- __  W/ Detent Latches	<b>Page 20-22</b>
<b>Horizontal Orientation</b> 2MM - HSD - __ - HT 					

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## SHROUDED HEADERS - WITH POSITIVE LATCH

### SMART PART NUMBER DEFINITION



#### 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

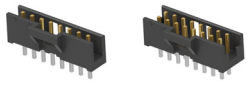

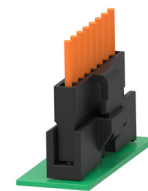
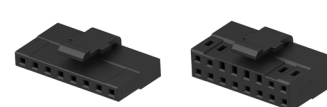
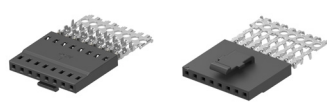

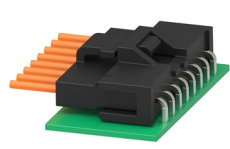
### DESIGN NAVIGATOR

	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

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## SHROUDED HEADERS - WITH POSITIVE LATCH

### MATEABLE PARTS

Shrouded Headers w/ Positive Latch	W-t-B Orientation	Mateable Receptacles			
		Crimp Receptacles	Page 17-19	IDC Receptacles <i>Single row Only</i>	Page 20-22
<b>Vertical Orientation</b>  2MM - HSP - __ - VT   2MM - HSP - __ - VS 		2MM - RCP - __  W/ Positive Latch		2MM - RDP - __  W/ Positive Latch	
<b>Horizontal Orientation</b>  2MM - HSP - __ - HT 					

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## BOARD RECEPTACLES

### SMART PART NUMBER DEFINITION

2MM - R - \_ - \_ - \_ - \_ - \_ - \_ -

#### PRODUCT SERIES

<b>2MM</b>	AMPMODU 2 mm series	1
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#### GENDER / TYPE

<b>R</b>	Receptacle	2
----------	------------	---

#### NUMBER OF ROWS

<b>S</b>	Single row	3
<b>D</b>	Double row	

#### NUMBER OF POSITIONS PER ROW

<b>##</b>	02 thru 25 per row (enter two digits)	4
-----------	--	---

#### ORIENTATION & TERMINATION

<b>VT</b>	Vertical through hole	5
<b>VTR</b>	Vertical through hole outrigger	
<b>VS</b>	Vertical surface mount	
<b>HT</b>	Horizontal through hole	
<b>HS</b>	Horizontal surface mount	

\*see table DESIGN NAVIGATOR for guidance

#### SMART PN EXAMPLES

- AMPMODU 2 mm, board receptacle, double row, 8 positions (2 x 4), horizontal SMT, tail length: N/A, gold flash, T&R without cap: **2MM-R-D04-HS-00-F-TR**

## DESIGN NAVIGATOR

	Orientation & Termination	Tail Length		Packaging
VT		01	0.079" [2.0 mm]	TRP
		02	0.106" [2.7 mm]	TBP
				TRP
VTR		01	0.091" [2.3 mm]	TRP
		02	0.110" [2.8 mm]	TBP
				TRP
VS		00	-	TRP
		02	0.110" [2.8 mm]	TBP
				TB
HT		01	0.083" [2.1 mm]	TR
		02	0.110" [2.8 mm]	TB
				TR
HS		00	-	TB
		02	0.110" [2.8 mm]	TR
				TB

#### PACKAGING

<b>TB</b>	Tube without cap
<b>TBP</b>	Tube with cap
<b>TR</b>	Tape and reel without cap
<b>TRP</b>	Tape and reel with cap

\*select allowable Packaging from table DESIGN NAVIGATOR

#### PLATING

<b>T</b>	Tin
<b>F</b>	4μ" [0.1 μm] Gold (Gold flash)
<b>M</b>	15μ" [0.38 μm] Gold
<b>H</b>	30μ" [0.76 μm] Gold

#### TAIL LENGTH

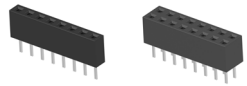
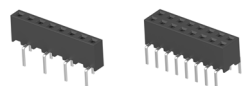
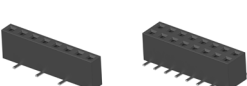
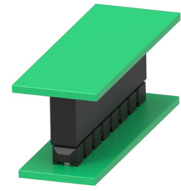
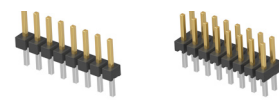

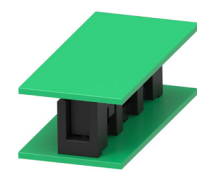
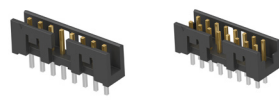

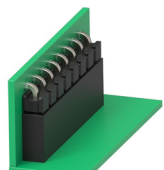

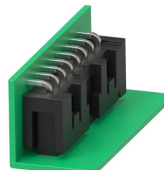

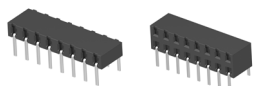

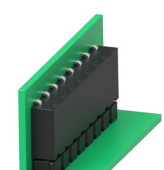
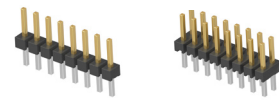

<b>00</b>	N/A for surface mount
<b>01</b>	0.079 - 0.091" [2.0 - 2.3 mm]
<b>02</b>	0.106 - 0.110" [2.7 - 2.8 mm]
<b>03</b>	0.126 - 0.134" [3.2 - 3.4 mm]

\*select allowable Tail Length from table DESIGN NAVIGATOR

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## BOARD RECEPTACLES

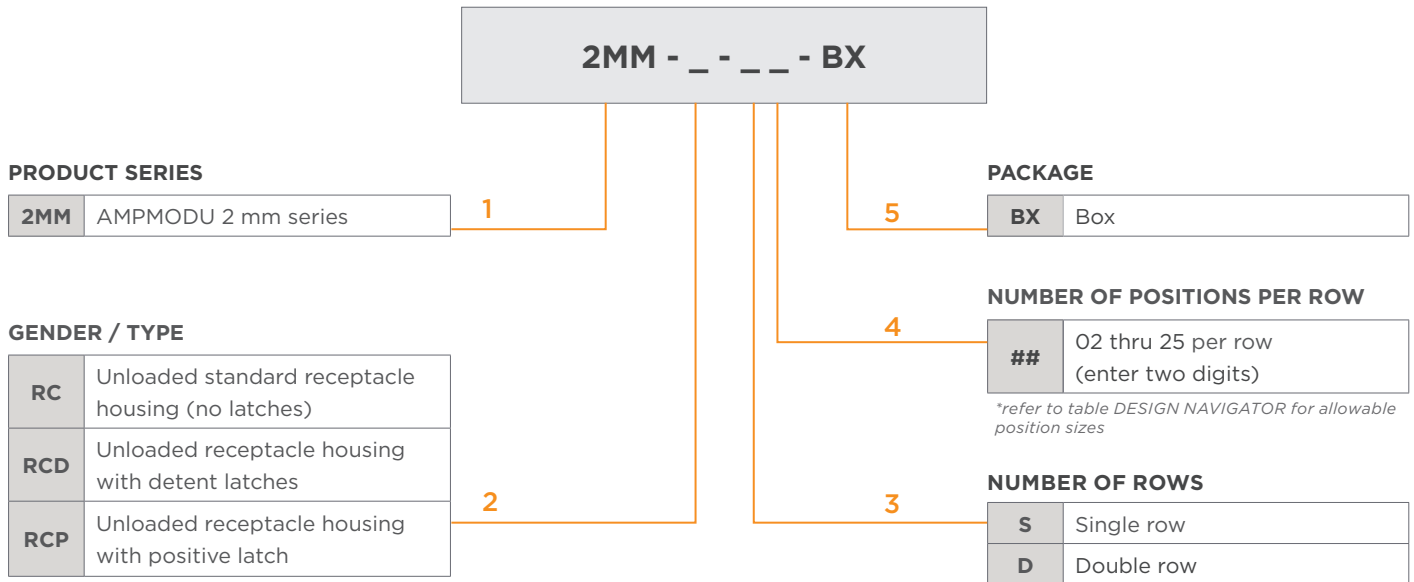
### MATEABLE PARTS

Board Receptacles	B-t-B Orientation	Mateable Headers		
<p><b>Vertical Orientation</b></p> <p>2MM - R - __ - VT</p>  <p>2MM - R - __ - VTR</p>  <p>2MM - R - __ - VS</p> 	<p>Parallel</p> 	<p><b>Vertical Breakaway Headers</b></p> <p>2MM - HB - __ - VT</p>  <p>2MM - HB - __ - VS</p> 	<p>Page 9-10</p>	
	<p>Parallel</p> 	<p><b>Vertical Shrouded Headers w/ Detent Latches</b></p> <p>2MM - HSD - __ - VT</p>  <p>2MM - HSD - __ - VS</p> 	<p>Page 11-12</p>	
	<p>Perpendicular</p> 	<p><b>Horizontal Breakaway Headers</b></p> <p>2MM - HB - __ - HT</p> 	<p>Page 9-10</p>	
	<p>Perpendicular</p> 	<p><b>Horizontal Shrouded Headers w/ Detent Latches</b></p> <p>2MM - HSD - __ - HT</p> 	<p>Page 11-12</p>	
	<p><b>Horizontal Orientation</b></p> <p>2MM - R - __ - HT</p>  <p>2MM - R - __ - HS</p> 	<p>Perpendicular</p> 	<p><b>Vertical Breakaway Headers</b></p> <p>2MM - HB - __ - VT</p> 	<p>Page 9-10</p>
			<p>2MM - HB - __ - VS</p> 	

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## CRIMP SNAP-IN RECEPTACLES

### SMART PART NUMBER DEFINITION



### SMART PN EXAMPLES

- AMPMODU 2 mm, crimp receptacle with detent latches, double row, 16 positions (2 x 8), box: **2MM-RCD-D08-BX**

### DESIGN NAVIGATOR

Housing Style	Number of Rows	Number of Positions per Row	Packaging Method
Standard (no latches)	Single row 	02 thru 25	Box
	Double row 	02 thru 25 per row	
With detent latches	Single row 	07 thru 16	
	Double row 	07 thru 16, 20, 22, 25 per row	
With positive latch	Single row 	03 thru 16	
	Double row 	03 thru 16 per row	

\* Tube packaging is available upon request.

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## CRIMP SNAP-IN RECEPTACLES

### RECEPTACLE CONTACT



**2MM - RT - \_ - \_ - \_**

#### PRODUCT SERIES

<b>2MM</b>	AMPMODU 2 mm series
------------	---------------------

#### GENDER / TYPE

<b>RT</b>	Receptacle crimp contact
-----------	--------------------------

#### WIRE SIZE

<b>S</b>	AWG 30-28 [0.05 - 0.08 mm <sup>2</sup> ]
<b>M</b>	AWG 28-24 [0.08 - 0.22 mm <sup>2</sup> ]

#### PACKAGING

<b>ST</b>	Strip form (30K pcs/reel)
<b>LP</b>	Loose piece

#### PLATING

<b>T</b>	Tin
<b>F</b>	4 μ" [0.1 μm] gold (gold flash)
<b>M</b>	15 μ" [0.38 μm] gold
<b>H</b>	30 μ" [0.76 μm] gold

#### SMART PN EXAMPLES

- AMPMODU 2 mm, crimp receptacle contact, AWG 30 - 28, tin, 30kpcs/reel: **2MM-RT-S-T-ST**


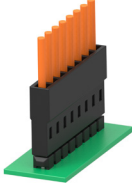

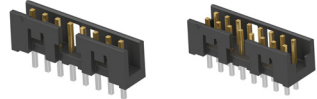



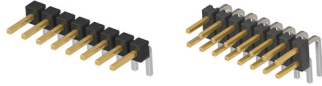


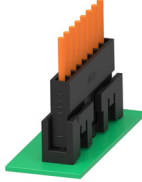
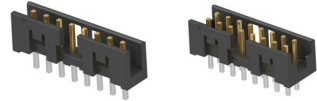

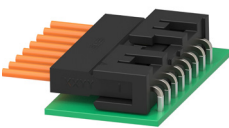
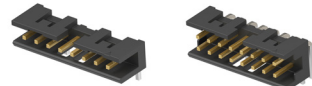

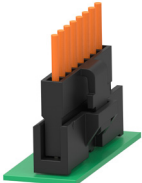
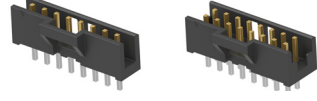
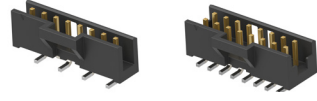
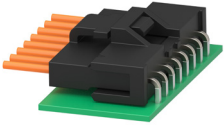
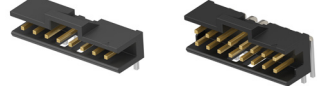
### APPLICATION TOOLING

Tooling	Images	Contact Package	Contact AWG 30-28	Contact AWG 28-24
Hand tool		Loose Piece (LP)	<a href="#"><u>2326270-1</u></a>	<a href="#"><u>2326267-1</u></a>
Ocean applicator		30k pcs per/reel (ST)	Upon request	Upon request
Extraction tool		<a href="#"><u>9-1579028-8</u></a> <i>Suitable for all receptacles - to disengage locking lance from front window.</i>		
		<a href="#"><u>843477-3</u></a> <i>Suitable for standard and detent latch receptacles only - to disengage locking lance from side, top or bottom windows.</i>		

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## CRIMP SNAP-IN RECEPTACLES

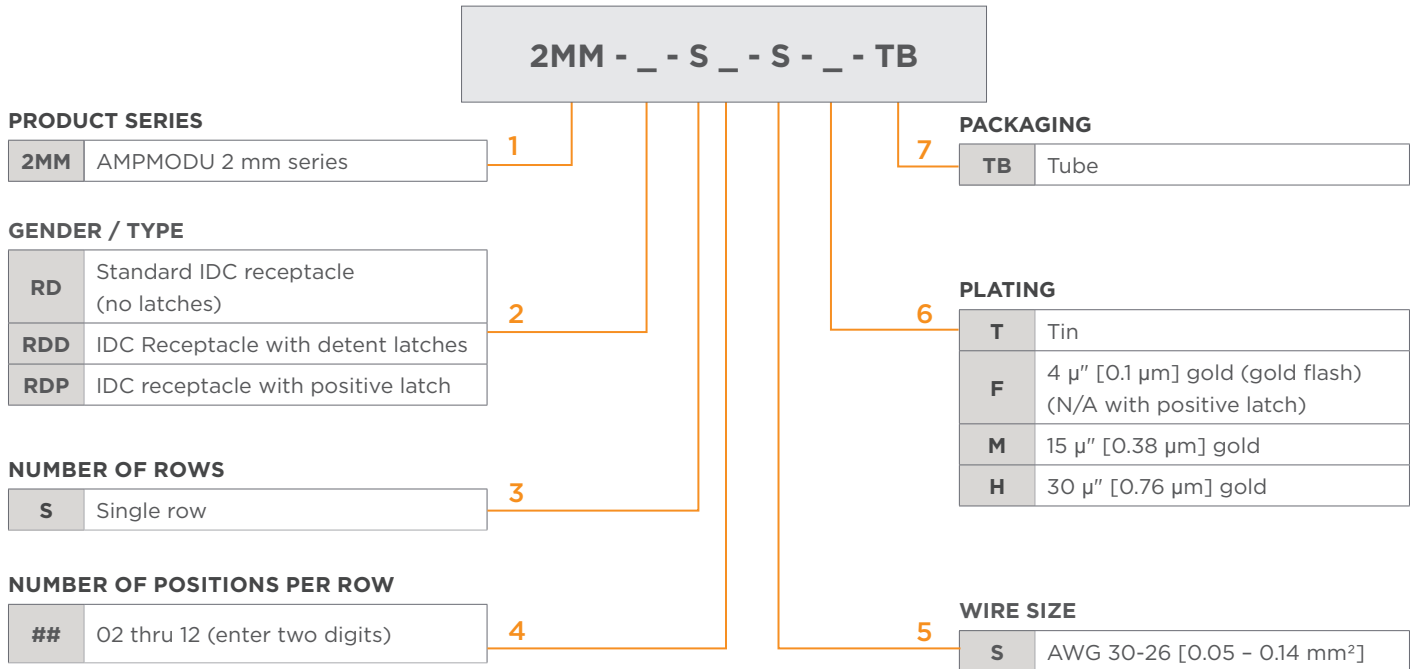
### MATEABLE PARTS

Wire Receptacles	W-t-B Orientation	Mateable Headers			
<b>Standard (No Latches)</b>  2MM - RC - __  		<b>Vertical Breakaway Headers</b> Page 9-10  2MM - HB - __ - VT 	<b>Vertical Shrouded Headers w/ Detent Latches</b> Page 11-12  2MM - HSD - __ - VT 		
		2MM - HB - __ - VS 	2MM - HSD - __ - VS 		
		<b>Horizontal Breakaway Headers</b> Page 9-10  2MM - HB - __ - HT 	<b>Horizontal Shrouded Headers w/ Detent Latches</b> Page 11-12  2MM - HSD - __ - HT 		
<b>w/ Detent Latches</b>  2MM - RCD - __  		<b>Vertical Shrouded Headers w/ Detent Latches</b> Page 11-12  2MM - HSD - __ - VT 			
		2MM - HSD - __ - VS 			
		<b>Horizontal Shrouded Headers w/ Detent Latches</b> Page 11-12  2MM - HSD - __ - HT 			
<b>w/ Positive Latch</b>  2MM - RCP - __  		<b>Vertical Shrouded Headers w/ Positive Latch</b> Page 13-14  2MM - HSP - __ - VT 			
		2MM - HSP - __ - VS 			
		<b>Horizontal Shrouded Headers w/ Positive Latch</b> Page 13-14  2MM - HSP - __ - HT 			

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## INSULATION DISPLACEMENT CONTACT (IDC) RECEPTACLES

### SMART PART NUMBER DEFINITION



\*see table DESIGN NAVIGATOR for available positions

### SMART PN EXAMPLES

- AMPMODU 2 mm, IDC receptacle with positive latch, single row, 7 positions (1 x 7), AWG 30 - 26, 30μ" [0.76 μm] gold, tube: **2MM-RDP-S07-S-H-TB**






### RECEPTACLE HOUSINGS

Type	Images	Wire size	Plating	Number of Positions
Standard (no latches)		AWG 30-26 [0.05 - 0.14 mm <sup>2</sup> ]	30 μ" [0.76 μm] gold	02 thru 12
			15 μ" [0.38 μm] gold	
			4 μ" [0.1 μm] gold	
			Tin	
With detent latches		AWG 30-26 [0.05 - 0.14 mm <sup>2</sup> ]	30 μ" [0.76 μm] gold	07 thru 12
			15 μ" [0.38 μm] gold	
			4 μ" [0.1 μm] gold	
			Tin	
With positive latch		AWG 30-26 [0.05 - 0.14 mm <sup>2</sup> ]	30 μ" [0.76 μm] gold	03 thru 12
			15 μ" [0.38 μm] gold	
			Tin	

## AMPMODU 2 mm INTERCONNECTION SYSTEM

### INSULATION DISPLACEMENT CONTACT (IDC) RECEPTACLES

#### APPLICATION TOOLING

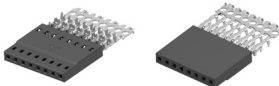
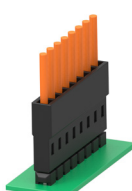
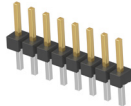
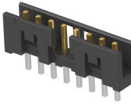
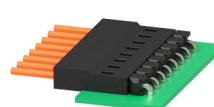

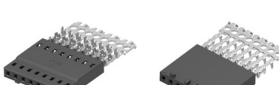
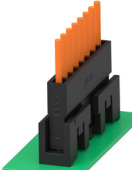
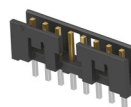
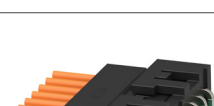
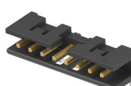

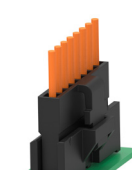

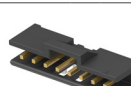
Tooling	Images	TE Part Number
Terminating head*		<a href="#"><u>2326300-1</u></a>
Pistol grip manual handle*		<a href="#"><u>58074-1</u></a>
Pneumatic handle*		<a href="#"><u>58075-1</u></a>
Extraction tool		<a href="#"><u>9-1579028-8</u></a> <i>Suitable for all receptacles - to disengage locking lance from front window.</i>
		<a href="#"><u>843477-3</u></a> <i>Suitable for standard and detent latch receptacles only - to disengage locking lance from side, top or bottom windows.</i>

\*Terminating head needs to be used with the manual or pneumatic handle.

# AMPMODU 2 mm INTERCONNECTION SYSTEM

## INSULATION DISPLACEMENT CONTACT (IDC) RECEPTACLES

MATEABLE PARTS Single row Only

Wire Receptacles	W-t-B Orientation	Mateable Headers			
		Vertical Breakaway Headers	Page 9-10	Vertical Shrouded Headers w/ Detent Latches	Page 11-12
<b>Standard (No Latches)</b>  2MM - RD - __  		2MM - HB - __ - VT		2MM - HSD - __ - VT	
		2MM - HB - __ - VS		2MM - HSD - __ - VS	
		Horizontal Breakaway Headers	Page 9-10	Horizontal Shrouded Headers w/ Detent Latches	Page 11-12
		2MM - HB - __ - HT		2MM - HSD - __ - HT	
<b>w/ Detent Latches</b>  2MM - RDD - __  		Vertical Shrouded Headers w/ Detent Latches	Page 11-12		
		2MM - HSD - __ - VT			
		Horizontal Shrouded Headers w/ Detent Latches	Page 11-12		
		2MM - HSD - __ - HT			
<b>w/ Positive Latch</b>  2MM - RDP - __  		Vertical Shrouded Headers w/ Positive Latch	Page 13-14		
		2MM - HSP - __ - VT			
		Horizontal Shrouded Headers w/ Positive Latch	Page 13-14		
		2MM - HSP - __ - HT			

# AMPMODU 2 mm INTERCONNECTION SYSTEM

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