



# MICRO MATE-N-LOK CONNECTOR SYSTEM

## Quick Reference Guide

The Micro MATE-N-LOK 3 mm connector system offers wire-to-wire and wire-to-board connections with contacts on a 3 mm (0.118) centerline and current ratings up to 5 Amps max. per line. Both single-row and dual-row configurations are available. Crimp, snap-in pin and receptacle contacts are used to terminate 30-18 (0.05-0.9 mm<sup>2</sup>) AWG wire with insulation diameters up to 1.52 mm. Plug and receptacle housings allow wire-to-wire and wire-to-panel configurations and header assemblies offer wire-to-board connections in vertical and right angle configurations. These IR reflow process compatible headers are available in through-hole and surface mount configurations with multiple board mount options.

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## FEATURES AND BENEFITS

- Wire-to-wire and wire-to-board pin and receptacle connector system
- Contacts are on 3 mm centerline spacing and are available in strip form or loose piece
- Panel mount or free-hanging versions
- Dual beam receptacle contact design for improved reliability
- PCB mount pin header assemblies available in both vertical and right angle styles and surface mount or through hole versions
- Available in low profile design (<4.7 mm)
- Discrete wire interconnect available in 2-12 position single row and 2-24 position dual row
- Housings available to accommodate 18 AWG wire in select circuits up to 6 position
- UL, CSA and VDE approved
- Multiple flammability options, including UL 94 V-0, UL 94 V-2, and glow wire tested (GWT\*)

## PRODUCT APPLICATIONS

- Household appliances
- Lighting
- Factory automation
- Data storage
- Gaming
- Vending
- Garage door openers
- Security systems

## ADDITIONAL INFORMATION

For more information about the TE Connectivity Micro MATE-N LOK connector offerings, please refer to these resources:

- [Micro MATE-N-LOK connector product landing page](#)
- [Product Specification 108-1836](#)
- [Application Specification 114-13000](#)

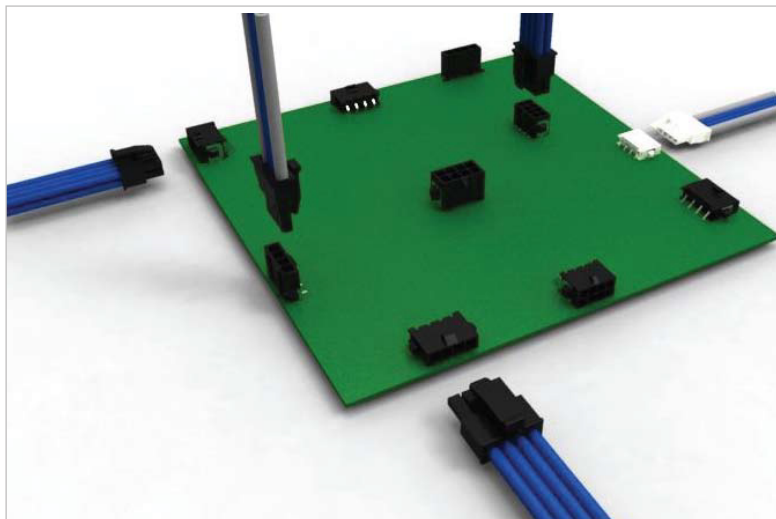
\*For more information on glow wire testing please review the [white paper Glow Wire Testing for the Appliance Industry](#) or visit the [Glow Wire Capable Connectors product page](#).

## CONTACTS

Wire Size Range AWG (mm <sup>2</sup> )	Insulation Diameter Range	Receptacle	Pin	Contact Base Part No. (PN)		Plating			Application Tooling*	Hand Tool
				Strip Form	Loose Piece	Tin	15 $\mu$ Gold	30 $\mu$ Gold		
26-30 0.12-0.05	.035-.060 0.89-1.52	x	-	794607	794611	PN-1	1-PN-1	1-PN-2	2151142-1	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52	x	-	794606	794610	PN-1	1-PN-1	1-PN-2	2151022-1	91501-1
22-18 0.3-0.9	.059-.110 1.50-2.79	x	-	2008625	-	PN-1	PN-2	PN-3	2266495-1	2217299-1 (18AWG)
26-30 0.12-0.05	.035-.060 0.89-1.52	-	x	794609	794613	1-PN-0	1-PN-1	1-PN-2	2836146-1	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52	-	x	94608	794612	1-PN-0	1-PN-1	1-PN-2	2151616-1	91501-1

\* For application tooling, see 114-13000 for AMPOMATOR CLS machine, AMP-O-LECTRICC Model K terminator and AMP-O-LECTRIC Model G terminator.

**Note:** To select a contact and plating, first select the contact base part number and add appropriate plating prefix and suffix. For example, for a loose piece receptacle with 30 $\mu$  gold plating, select base part number 794610 and add the plating prefix and suffix for 30 $\mu$  gold to obtain part number 1-794610-2.



## SINGLE ROW HEADERS

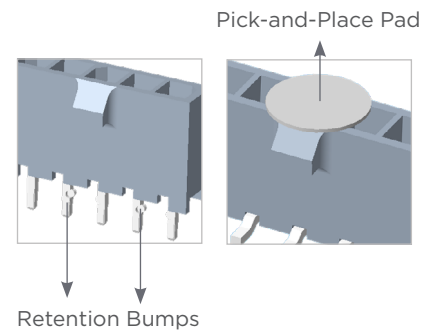
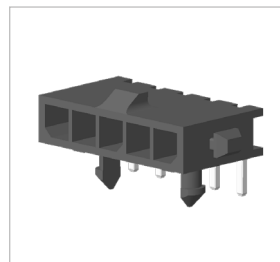
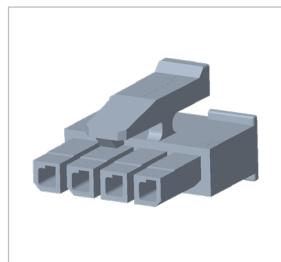
Part No. (PN)	Position	Single Row	Plating Style			Vertical	Right Angle	SMT	Thruhole	SMT Hold Down	Thru-hole Metal Hold Down	Plastic Hold Down	Pick-and-Place Pad	Retention feature on Solder Tail	Packing Type		Mating Half
			Tin	15µ gold	30µ gold										Tray	Tape and Reel	
x-1445050-x	2-12	x	x			x			x			x		x			x-1445022-x
x-1445051-x	2-12	x	x			x			x		x				x		x-1445022-x
x-1445052-x	2-12	x	x			x		x			x		x			x	x-1445022-x
x-1445053-x	2-12	x	x			x		x	x				x			x	x-1445022-x
x-1445054-x	2-12	x	x				x		x		x				x		x-1445022-x
x-1445055-x	2-12	x	x				x		x			x			x		x-1445022-x
x-1445056-x	2-12	x	x				x	x			x					x	x-1445022-x
x-1445057-x	2-12	x	x				x	x		x						x	x-1445022-x
x-1445084-x	2-12	x		x		x			x			x		x	x		x-1445022-x
x-1445085-x	2-12	x		x		x			x		x				x		x-1445022-x
x-1445086-x	2-12	x		x		x		x			x		x			x	x-1445022-x
x-1445087-x	2-12	x		x		x		x		x			x			x	x-1445022-x
x-1445088-x	2-12	x		x			x		x		x				x		x-1445022-x
x-1445089-x	2-12	x		x			x		x			x			x		x-1445022-x
x-1445090-x	2-12	x		x			x	x			x					x	x-1445022-x
x-1445091-x	2-12	x		x			x	x		x						x	x-1445022-x
x-1445093-x	2-12	x			x	x			x			x		x	x		x-1445022-x
x-1445094-x	2-12	x			x	x			x		x				x		x-1445022-x
x-1445095-x	2-12	x			x	x		x			x		x			x	x-1445022-x
x-1445096-x	2-12	x			x	x		x		x			x			x	x-1445022-x
x-1445097-x	2-12	x			x		x		x		x				x		x-1445022-x
x-1445098-x	2-12	x			x		x		x			x			x		x-1445022-x
x-1445099-x	2-12	x			x		x	x			x					x	x-1445022-x
x-1445100-x	2-12	x			x		x	x		x						x	x-1445022-x

## PART NUMBER EXPLANATION

2-PN-2	2 Position Header
2-PN-3	3 Position Header
2-PN-4	4 Position Header
2-PN-5	5 Position Header
2-PN-6	6 Position Header
2-PN-7	7 Position Header
2-PN-8	8 Position Header
2-PN-9	9 Position Header
3-PN-0	10 Position Header
3-PN-1	11 Position Header
3-PN-2	12 Position Header

**Note:** To select the complete part number,

- Use 2- prefix for single row headers up to 9 positions
- Use 3- prefix for single row headers from 10 to 12 positions
- The -X suffix indicates number of positions  
(Example: 2-1445050-5 would be a 5 position header.  
3-1445050-1 would be an 11 position header)



## DOUBLE ROW HEADERS

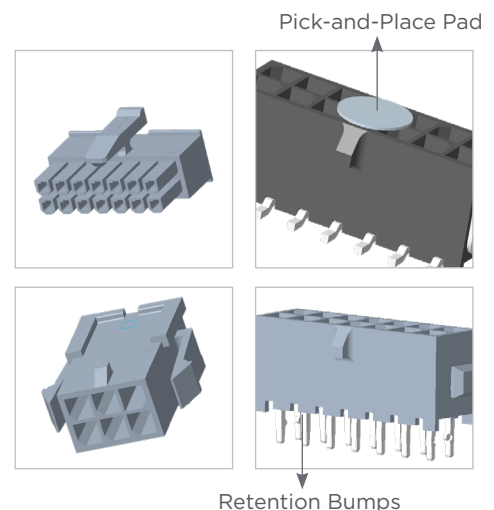
Part No. (PN)	Position	Double Row	Plating Style			Vertical	Right Angle	SMT	Thruhole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Pick-and-Place Pad	Retention feature on Solder Tail	Packing Type		Mating Half
			Tin	15µ gold	30µ gold										Tray	Tape and Reel	
x-794618-x	2-24	x	x				x		x			x			x		x-794617-x
x-794619-x	2-24	x		x			x		x			x			x		x-794617-x
x-794620-x	2-24	x			x		x		x			x			x		x-794617-x
x-794621-x	2-24	x	x				x	x				x				x	x-794617-x
x-794622-x	2-24	x		x			x	x				x				x	x-794617-x
x-794623-x	2-24	x			x		x	x				x				x	x-794617-x
x-794624-x	2-24	x	x				x	x			x					x	x-794617-x
x-794625-x	2-24	x		x			x	x			x					x	x-794617-x
x-794626-x	2-24	x			x		x	x			x					x	x-794617-x
x-794627-x	2-24	x	x				x	x		x						x	x-794617-x
x-794628-x	2-24	x		x			x	x		x						x	x-794617-x
x-794629-x	2-24	x			x		x	x		x						x	x-794617-x
x-794630-x	2-24	x	x			x			x					x	x		x-794617-x
x-794631-x	2-24	x		x		x			x					x	x		x-794617-x
x-794632-x	2-24	x			x	x			x					x	x		x-794617-x
x-794633-x	2-24	x	x			x			x			x				x	x-794617-x
x-794634-x	2-24	x		x		x			x			x				x	x-794617-x
x-794635-x	2-24	x			x	x			x			x				x	x-794617-x
x-794636-x	2-24	x	x			x			x			x				x	x-794617-x
x-794637-x	2-24	x		x		x			x			x				x	x-794617-x
x-794638-x	2-24	x			x	x			x			x				x	x-794617-x
x-794677-x	2-24	x	x				x		x						x		x-794617-x
x-794678-x	2-24	x		x			x		x						x		x-794617-x
x-794679-x	2-24	x			x		x		x						x		x-794617-x
x-794680-x	2-24	x	x			x			x					x	x		x-794617-x
x-794681-x	2-24	x		x		x			x					x	x		x-794617-x
x-794682-x	2-24	x			x	x			x					x	x		x-794617-x

## PART NUMBER EXPLANATION

3-PN-2	2 Position Header
3-PN-4	4 Position Header
3-PN-6	6 Position Header
3-PN-8	8 Position Header
4-PN-0	10 Position Header
4-PN-2	12 Position Header
4-PN-4	14 Position Header
4-PN-6	16 Position Header
4-PN-8	18 Position Header
5-PN-0	20 Position Header
5-PN-2	22 Position Header
5-PN-4	24 Position Header

**Note:** To select the complete part number,

- Use 3- prefix for dual row headers up to 8 positions
- Use 4- prefix for dual row headers from 10 to 18 positions
- Use 5- prefix for dual row headers from 20 to 24 positions
- The -X suffix indicates number of positions (Example: 3-794630-4 would be a 4 position header. 4-794630-4 would be a 14 position header. 5-794630-4 would be a 24 position header.)



## HOUSINGS

No. of Circuits*	Part No.	Plug	Receptacle	Single Row	Double Row	Free Hanging	Panel Mount	Mating Half	Terminals	Color	Remarks
2-12	x-1445049-x	x		x		x			x-794608-x	Black	
2-12	x-1445048-x	x		x			x	x-1445022-x	x-794609-x x-794612-x x-794613-x		
2-12	x-1445022-x		x	x				x-1445049-x, x-1445048-x single row headers	x-794606-x x-794607-x x-794610-x x-794611-x	Black	
2-4	2029047-x		x	x				low profile headers	x-794606-x, x-794607-x, x-794610-x, x-794611-x	Black	Low profile housing
2-4	2029102-x		x	x			Natural				
2-6	2008570-X		x		x			single row headers	2008625-x** x-794606-x x-794607-x x-794610-x x-794611-x	Black	Low profile housing, Accepts 18AWG wire
2-6	2008571-X		x		x		low profile headers				

### Note:

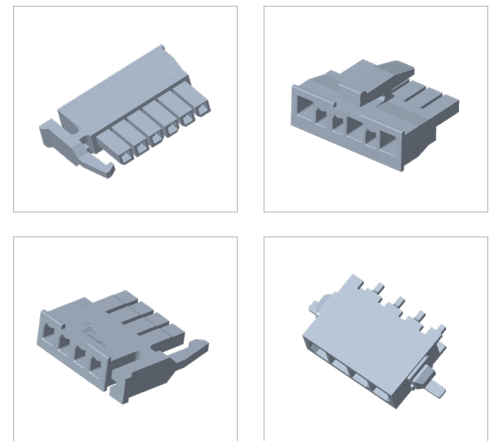
- (\*) Use the prefix and suffix to indicate position size.  
(Example: 794617-2 would be a 2 position housing and 2-794617-4 would be a 24 position housing)
- (\*\*) Terminal can be used in the other receptacle housings, but not with 18AWG cables. This size needs to be used only in the specific positions designed for that.
- Receptacle terminals mate in the receptacle housings and pin terminals mate in the Plug housings

## SELECT 18 AWG RECEPTACLE HOUSINGS

No. of Position	Part No	18 AWG Circuits	Black	Top Latch	Side Latch
2	2008570-2	1, 2	x		x
3	2008570-3	1, 3	x		x
4	2008570-4	1, 4	x		x
5	2008570-5	1, 3, 5	x		x
6	2008570-6	1, 3, 6	x		x
2	2008571-2	1, 2	x	x	
3	2008571-3	1, 3	x	x	
4	2008571-4	1, 4	x	x	
5	2008571-5	1, 3, 5	x	x	
6	2008571-6	1, 3, 6	x	x	

### Notes:

- For natural color add 1- prefix to base part number
- Remaining circuits accommodate 20 AWG wire or smaller using standard contacts



## LOW PROFILE RECEPTACLE HOUSINGS AND HEADERS

Part Number	Position	Single Row	Plating			Vertical	Right Angle	SMT	Thru-hole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Pick-and-Place Pad	Retention feature on Solder Tail	Packaging Type		Mating Half	Color
			Tin	15µ Gold	30µ Gold										Tray	Tape & Reel		
2029030-x	2-4	x	x				x	x		x					x	x	2029047-x	Black
2029104-x	2-4	x	x				x	x		x					x	x	2029102-x	Natural
2029266-x	2-4	x			x		x	x		x					x	x	2029047-x	Black

## VDE APPROVED CONNECTORS

No. of Circuits	Part Number	Plug	Receptacle	Single Row	Double Row	Free Hanging	Panel Mount	Mating Half	Terminals
2 to 4	2315758-x	x			x		x	2315744-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2 to 4	2315759-x	x			x	x		2315744-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
6 to 10	3-794615-x	x			x		x	3-794617-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
6 to 10	3-794616-x	x			x	x		3-794617-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2, 3 and 4	2315785-x	x		x		x		2315752-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2, 3 and 4	2315786-x	x		x			x	2315752-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2 to 4	2315744-x		x		x			2315758-x, 2315759-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x
6 to 10	3-794617-x		x		x			3-794615-x, 3-794616-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x
2, 3 and 4	2315752-x		x	x				2315785-x, 2315786-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x

**Note:**

- Use the suffix -6 (6 position housing), -8 (8 position housing) or -0 (10 position housing)
- These connectors have keying by position size - different from the standard receptacle and plug connectors

Additional headers with alternative packaging, colors, and materials are available upon request.

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## QUESTIONS THAT WILL HELP YOU BETTER SELECT THE PRODUCT THAT YOU NEED:

### What are the current and voltage requirements for your application?

The Micro MATE-N-LOK 3 mm connector system has a maximum current rating of 5 Amps per line and is rated for 250 Volts AC/DC.

### What are the wire type and size requirements?

The Micro MATE-N-LOK 3 mm connector system contacts are approved for use with 22-18 (0.3-0.9), 24-20 (0.2-0.6) and 30-26 (0.05-0.15) AWG wire with a maximum insulation diameter of 0.110 (2.79).

### What are the number of positions?

The Micro MATE-N-LOK 3 mm connector system is available in 2-12 position single row and 2-24 position dual row configurations on a 3.0 mm pitch.

### What are the operating temperature requirements?

The Micro-MATE-N-LOK 3 mm connector system has a maximum operating temperature of 105°C. For more information regarding operating temperatures refer to Product Specification 108-1836.

### What packaging types are offered for headers and housings?

The Micro MATE-N-LOK 3 mm connector system offers tape and reel packaging for surface mount headers, tray packaging for thru-board headers and bulk packaging for all receptacle and plug housings.

### What is the benefit of choosing low-profile receptacle housings?

The Micro MATE-N-LOK 3 mm connector system offers a low profile receptacle housing for applications that need to meet minimal height requirements. This low profile design offers a mated height of only 4.7 mm and is available in 2, 3 and 4 positions, in black or natural color.

### What is the benefit of using an 18 AWG select circuit receptacle housing?

The Micro MATE-N-LOK 3 mm connector system offers a special 18 AWG wire-to-board select circuit housing for low voltage lighting applications. Designed to accommodate 18 AWG UL1007 wire in select circuits of the 2, 3, 4, 5 and 6 position housings, this product is ideal to minimize millivolt drops on long wire runs sometimes required by low voltage conventional and solid state lighting.

### What flame resistant material options are available?

The Micro MATE-N-LOK 3 mm connector system is available with multiple flammability options, including UL 94 V-0, UL 94 V-2, and glow wire tested (GWT).

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