



**▶ KK[®] 254 Reflow Process Compatible
(RPC) Connector System**

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**KK[®] 254 RPC Vertical and Right-Angle
Headers with Friction Lock**



UNIQUE SELLING PROPOSITION

Ideal for use in industries such as automotive, medical and consumer, KK[®] 254 Reflow Process Compatible (RPC) Connector System supports a lead-free solder process and delivers up to 5.0A and 250V per circuit in a 2.54mm pitch package

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WHAT PROBLEM OR ISSUE IS THIS PRODUCT SOLVING?

Manufacturers are being driven by consumers and environmental agencies to be environmentally conscious; one way to do so is to reduce the amount of lead in components whenever possible. Removing lead from the solder-paste process is one way to conform and adhere to RoHS initiatives.

Additional Information

- › **The KK[®] RPC connector withstands temperatures up to +260°C (lead-filled solder-paste process connectors withstand only up to +235°C). The KK[®] RPC connector system addresses these needs by offering high-temperature nylon that can withstand temperatures up to +260°C while maintaining the standard KK[®] header footprint**
- › **Note: KK[®] 396 and KK[®] 396 RPC connectors cannot mate to the KK[®] 254 or KK[®] 254 RPC connector systems.**

Markets and Applications

› Medical

- Patient monitoring
- Portable diagnostics
- Dental equipment

› Automotive

- Control modules
- Lighting fixtures
- Stereos
- Display panels

› Data/Computing and Telecommunications/Networking

- Scanners/multi-function machines
- Printers
- Workstations

› Consumer

- Home appliances
- Washer/dryer
- Dishwashers
- Home security
- HVAC



Office Scanner



Dental Equipment



Car Console

Features and Benefits

High-temperature nylon housing	Withstands lead-free high-temperature solder processing up to +260°C . Does not require the drying needs of normal nylon
Optional box-style dual-cantilever terminal	Ideal for high-vibration environments
Polarized friction-lock header	Prevents mismatching
Standard KK header footprint, vertical, right-angle headers	Allows for drop-in replacement on existing header applications. Mates with standard KK receptacles
Matte-tin over nickel plating	Inhibits tin whiskering
PCB receptacles are available in standard KK® connectors	Ensures secure mating between headers and receptacles

Specifications

Pitch	2.54mm
Durability	25 cycles
Voltage	250V
Current	4.0A
Operating Temperature	Brass: -40 to +80°C Phosphor Bronze: -40 to +105°C
Contact Resistance	10 milliohms max.
Insulation Resistance	1,000 Megohms min.
Dielectric Strength	500V AC (RMS)

Ordering Information

Reflow Process Compatible Connectors

Order No.		Circuits	Pitch	Plating
Vertical	Right-Angle			
171856-0002	171857-0002	2	2.54mm	Tin (Sn)
171856-0003	171857-0003	3		
171856-0004	171857-0004	4		
171856-0005	171857-0005	5		
171856-0006	171857-0006	6		
171856-0007	171857-0007	7		
171856-0008	171857-0008	8		
171856-0009	171857-0009	9		
171856-0010	171857-0010	10		
171856-0011	171857-0011	11		
171856-0012	171857-0012	12		
171856-1002	171857-1002	2		
171856-1003	171857-1003	3		
171856-1004	171857-1004	4		
171856-1005	171857-1005	5		
171856-1006	171857-1006	6		
171856-1007	171857-1007	7		
171856-1008	171857-1008	8		
171856-1009	171857-1009	9		
171856-1010	171857-1010	10		
171856-1011	171857-1011	11		
171856-1012	171857-1012	12		

Ordering Information (continues)

Standard PCB Headers

Series No.	Pitch	Application	Friction Lock	Tail Type	Orientation
4030	2.54mm	Wire-to-Board, Board-to-Board, Signal	No	Straight	Right-Angle
4094					Vertical
42375					Right-Angle
42376					
42377					
43009		Wire-to-Board, Signal	Yes	Kinked PCB Tail	Vertical
47053					
7395				Straight	Right-Angle
7478			Staggered		
42009				Vertical	
42225			No	Straight	Right-Angle
42226					Vertical
42227			Yes		Right-Angle
42228					Vertical
6373					
6410					

Ordering Information (continues)

Standard PCB Receptacles

Series No.	Pitch	Application	Configurations
44812	2.54mm	Board-to-Board	Top Entry, Through Hole
4455			Top Entry, Through Hole, Right-Angle

Standard Crimp Terminals

Series No.	Pitch	Application	Base Material
2759	2.54mm	Signal	Brass
4809			
6459			Phosphor Bronze
8088			
41572			

Ordering Information (continues)

Standard Crimp Housings

Series No.	Pitch	Application	Friction Ramp
6471	2.54mm	Wire-to-Board, Signal	Yes
2695			Yes
7880			No
47054			Yes

The image features the Molex logo and tagline centered on a background of a white grid that recedes into the distance. The grid lines are thin and light gray, creating a sense of depth and perspective. The logo and text are in a clean, sans-serif font. The word 'molex' is in red, while the tagline 'one company > a world of innovation' is in black. The registered trademark symbol is a small circle with an 'R' inside, located at the top right of the 'x' in 'molex'.

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