



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

The KK[®] Reflow Process Compatible (RPC) connector system is designed to support RoHS lead-free initiatives. Designed with a nylon housing, the wire-to-board system can withstand temperatures up to +260°C.

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

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

171856 Vertical Header

171857 Right-Angle Header



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

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 and Dishwashers)
- Home security
- HVAC



Office Scanner



Car Console



Dental Equipment

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			
					15 µm Gold (Au)

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									
47053		Wire-to-Board, Signal	Yes	Kinked PCB Tail	Vertical				
7395					Straight	Right-Angle			
7478									
42009						Staggered	Vertical		
42225					No	Straight		Right-Angle	
42226								Vertical	
42227			Right-Angle						
42228			Vertical						
6373			Yes						Right-Angle
6410									Vertical

Ordering Information

Standard PCB Receptacles

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

Standard Crimp Terminals

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

Standard Crimp Housings

Series No.	Pitch	Application	Base Material
<u>6471</u>	2.54mm	Wire-to-Board, Signal	Yes
<u>2695</u>			No
<u>7880</u>			Yes
<u>47054</u>			

Specifications

Reference Information

Packaging:
Bag; Tape and Reel packaging to be released

UL File No.: TBD
CSA File No.: TBD

Mates With:
any KK® 2.54mm housing or PCB receptacle

Designed In: Millimeters
RoHS: Yes
Low Halogen: Yes
Glow Wire Compliant: Yes

Electrical

Voltage (max.): 250V
Current (max.): 4A
Contact Resistance (max.): 10mΩ
Dielectric Withstanding Voltage:
500V AC (RMS)
Insulation Resistance (min.): 1000MΩ

Mechanical

Contact Insertion Force: 11.12N
Contact Retention to Housing: 17.8N
Mating Force: 7.8N per circuit
Unmating Force: 2.3N per circuit
Durability (min.): 25 cycles

Physical

Housing: High-temperature Nylon
Contact: Brass
Plating:
Contact Area — Matte Tin (Sn) or Select Gold (Au)
Solder Tail Area — Matte Tin (Sn)
Underplating — Nickel (Ni)
PCB Thickness: 0.062mm
Operating Temperature:
Brass: -40 to +80°C
Phosphor Bronze: -40 to +105°C