



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

- Scanners/multi-function machines
- Printers
- Workstations

Consumer

- Home appliances (Washer/dryer and Dishwashers)
- Home security
- HVAC



Office Scanner



Car Console



Dental Equipment



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

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		15 µm Gold (Au)
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		

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				Straight	Right-Angle
7395					
7478					
42009			Staggered	Vertical	
42225			No	Straight	Right-Angle
42226					Vertical
42227			Yes		Right-Angle
42228					Vertical
6373					Vertical
6410					

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>			Phosphor Bronze
<u>6459</u>			
<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>			
<u>47054</u>			Yes

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