



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



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				Vertical	

Ordering Information

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			Phosphor Bronze
6459			
8088			
41572			

Standard Crimp Housings

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

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