



Delivering 13.0A and 600V per circuit, the KK® 396 Reflow Process Compatible (RPC) Connector System supports a lead-free solder process and is ideal for low- to mid-power wire-to-board and board-to-board applications

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 MarKK terminal with four points of contact	Support up to 13.0A per circuit. Ideal for higher power and high-vibration applications
Polarized friction-lock header	Prevents mismatching
Standard KK header footprint design	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® 396 Reflow Process Compatible (RPC) Connector System

171813 Vertical Header

171814 Right-Angle Header



KK® 396 RPC Vertical
and Right-Angle
Headers with Friction
Lock

Applications

Consumer

- Home appliances
 - Washer/dryer
 - Dishwashers
- Fire/smoke detectors
- HVAC
- Gaming
 - Coin changers, ATM
 - Gaming consoles
- Vending
- Voting machines

Data/Computing and

- ### Telecommunications/Networking
- Scanners/multi-function machines
 - Printers
 - Workstations
 - Mainframes

Medical

- Respirators
- Blood warming bags

Automotive

- Control modules
- Stereos



Office Scanner



Medical Equipment



Home Appliances



KK[®] 396
Reflow Process
Compatible (RPC)
Connector System

Ordering Information

Reflow Process Compatible Connectors

Order No.		Circuits	Pitch	Plating
Vertical	Right-Angle			
171813-0002	171814-0002	2	3.96mm	Tin (Sn)
171813-0003	171814-0003	3		
171813-0004	171814-0004	4		
171813-0005	171814-0005	5		
171813-0006	171814-0006	6		
171813-0007	171814-0007	7		
171813-0008	171814-0008	8		
171813-0009	171814-0009	9		
171813-0010	171814-0010	10		
171813-0011	171814-0011	11		
171813-0012	171814-0012	12		
171813-1002	171814-1002	2		15 µm Gold (Au)
171813-1003	171814-1003	3		
171813-1004	171814-1004	4		
171813-1005	171814-1005	5		
171813-1006	171814-1006	6		
171813-1007	171814-1007	7		
171813-1008	171814-1008	8		
171813-1009	171814-1009	9		
171813-1010	171814-1010	10		
171813-1011	171814-1011	11		
171813-1012	171814-1012	12		

Standard PCB Headers

Series No.	Configuration	Pitch	Application	Friction Lock	PC Peg	Breakaway
41791	Vertical	3.96mm	Wire-to-Board, Board-to-Board, Power	Yes	No	No
41792	Right-Angle					Yes
41671	Vertical				Yes	No
41672	Right-Angle					Yes
42491	Vertical			No	No	No
42492	Right-Angle					Yes
41661	Vertical					No
41662	Right-Angle					Yes
41771	Vertical					No
41772	Right-Angle					Yes

Ordering Information

Standard PCB Receptacles

Series No.	Pitch	Application	Material	Configurations
<u>41815</u>	3.96mm	Board-to-Board	UL 94V-0	Top Entry, Through Hole, Right-Angle
<u>2145</u>			UL 94V-2	

Standard Crimp Terminals

Series No.	Pitch	Application	Base Material
<u>2478</u>	3.96mm	Power	Phosphor Bronze
<u>2578</u>			Brass
<u>8818</u>			Phosphor Bronze
<u>6838</u>			Copper Alloy
<u>45570</u>			

Standard Crimp Housings

Series No.	Pitch	Application	Base Material
<u>2139</u>	3.96mm	Wire-to-Board, Power	Yes
<u>3069</u>			No
<u>6442</u>			Yes
<u>41695</u>			

Specifications

Reference Information

Packaging:
 Bag; T&R packaging to be released
 UL File No.: TBD
 CSA File No.: TBD
 Mates With:
 any KK® 3.96mm housing or PCB receptacle
 Designed In: Millimeters
 RoHS: Yes
 Low Halogen: Yes
 Glow Wire Compliant: Yes

Electrical

Voltage (max.): 600V
 Current (max.): 13.0A
 Contact Resistance (max.): 10mΩ
 Dielectric Withstanding Voltage:
 500V AC (RMS)
 Insulation Resistance (min.):
 1000MΩ

Mechanical

Contact Insertion Force: 17.8N
 Contact Retention to Housing: 36.8N
 Mating Force: 10.7N per circuit
 Unmating Force: 3.4N 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