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KK® 396 Reflow Process Compatible (RPC) Connector System

171813 Vertical Header

171814 Right-Angle Header

Delivering 13.0A and 600V per circuit, the KK® 396 Reflow Process Compatible (RPC) Connector System suports 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.

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

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 mismating
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

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

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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					
41671	Vertical					Yes
41672	Right-Angle					
42491	Vertical				Yes	No
42492	Right-Angle					
41661	Vertical			No	No	Yes
41662	Right-Angle					
41771	Vertical					No
41772	Right-Angle					

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Ordering Information

Standard PCB Receptacles

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

Standard Crimp Terminals

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

Standard Crimp Housings

Series No.	Pitch	Application	Friction Lock
2139	3.96mm	Wire-to-Board, Power	Yes
3069			
6442			No
41695			Yes

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: 1.60mm
Operating Temperature:
Brass: -40 to +80°C
Phosphor Bronze: -40 to +105°C

www.molex.com/link/kk396.html

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