



## 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

Electronics manufacturers are being driven by consumers and environmental agencies to be environmentally conscious; one way to do so is to reduce the amount of lead in components whenever possible. Removing lead from the connector solder-paste process is one way to conform and adhere to RoHS initiatives. KK® RPC connectors are lead-free and designed with high-temperature nylon that can withstand temperatures up to +260°C while maintaining the standard KK header footprint (lead-filled solder-paste-process connectors withstand only up to +235°C).

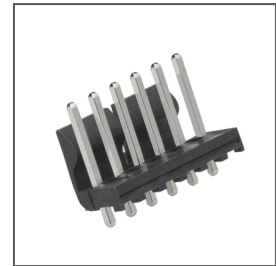
### Features and Benefits

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	Supports up to 13.0A per circuit. Ideal for higher power and high-vibration applications
Polarized friction-lock header	Prevents mismatching and ensures secure mating
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
Tape-and-reel packaging with pick-and-place caps available	Enables highly automated termination processing and accurate PCB placement

## 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

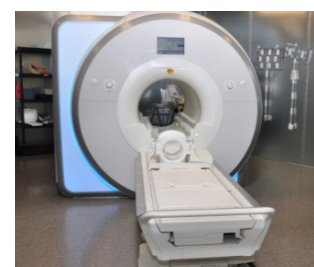
- Control modules
- Stereos



Office Scanner



Home Appliances



Medical Equipment



## Specifications

### Reference Information

Packaging: Bag; tape-and-reel  
 UL File No.: E29179  
 CSA File No.: LR19980  
 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

## KK® 396 Reflow Process Compatible (RPC) Connector System

### 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

## Ordering Information

### Reflow Process Compatible Connectors

Series No.		Circuits	Pitch	Plating	Packaging
Vertical	Right-Angle				
<a href="#">171813</a>	<a href="#">171814</a>	2 to 12	3.96mm	Tin (Sn)	Bag or Tape-and-Reel
171813	171814			15 μm Gold (Au)	

### Standard PCB Headers

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

### Standard PCB Receptacles

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

### Standard Crimp Terminals

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

### Standard Crimp Housings

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

[www.molex.com/link/kk396.html](http://www.molex.com/link/kk396.html)