

# HFLXPR4-F18V-1

# POWER CONNECTOR SOCKET



### Features

- The contact are made of copper alloys with high conductivity
- It has the characteristics of reliable connection, soft insertion, low contact resistance and high current carrying density
- The use of crown springs for contact ensures contact reliability
- It is used for DC and AC input/output of power supplies module of UPS and servers
- Mating With: HFLXPR4-M18RB-1 Power connector plug

RoHS compliant

### ELECTRICAL DATA

Rated Voltage		250VAC
Rated current	Ø1.02 Pin	5A
	Ø2.38 Pin	35A
Voltage Proof	Between Ø2.38 Pin	2500VAC
	Between Ø1.02 Pin	1000VAC
	Between Ø1.02 Pin and Ø2.38 Pin	2500VAC
Contact Resistance	Ø1.02 Pin	5.0mΩ Max
	Ø2.38 Pin	1.0mΩ Max
Insulation Resistance		1000MΩ Min

Notes: 1) The data shown above are initial values.

### CHARACTERISTICS

Temperature Range	-55°C to 125°C
Voltage surge	/
Salt Mist	48h
Humidity Temperature	40°C, 90% to 95%RH, 96h; No damage to parts <sup>(2)</sup>
Temperature life	432 hours at 125°C <sup>(2)</sup>
Thermal Shock	-55°C(30 min), +125°C(30 min), 15°C/min, 100 times <sup>(3)</sup>
Mechanical Shock	Acceleration of 30g, half sine wave, lasting 11 ms,±X,±Y,±Z direction 3 times each, the current instantaneous break time is less than 1µs <sup>(2)</sup>
Vibration	Frequency 10Hz~ 55Hz~ 10Hz,displace- ment amplitude 0.75mm, 55Hz~500Hz~55Hz, acceleration 10g, each vertical direction lasts for 2 hours, the current instantaneous break time is less than 1µs <sup>(2)</sup>
Protection Grade	/
Quality	Approx. 32.5g
Marking Mode	Laser etching
Durability	500 Times Min
Termination	Cable crimping

- Notes: 1) The data shown above are initial values.  
 2) The parts should not be damaged, and the contact resistance should meet the requirements of electrical performance parameters.  
 3) Meet the parts without damage, withstand voltage meet the requirements of electrical performance parameters.

### STORAGE REQUIREMENT

Environment temperature	-10°C to +40°C
Humidity	80% Max
Ambient gas	no acidity, no alkalescence and other corrosive gas
Stockpile period	Doesn't exceed one year from production date

Notes: 1) The data shown above are initial values.

### ORDERING INFORMATION

Type	HFLXPR4	-F	18	V	-1
Type of Contact	F: Female				
No.of Contact	18: 18 Contacts				
Structural Form	V: Vertical				
Extension No.	1: Extension				



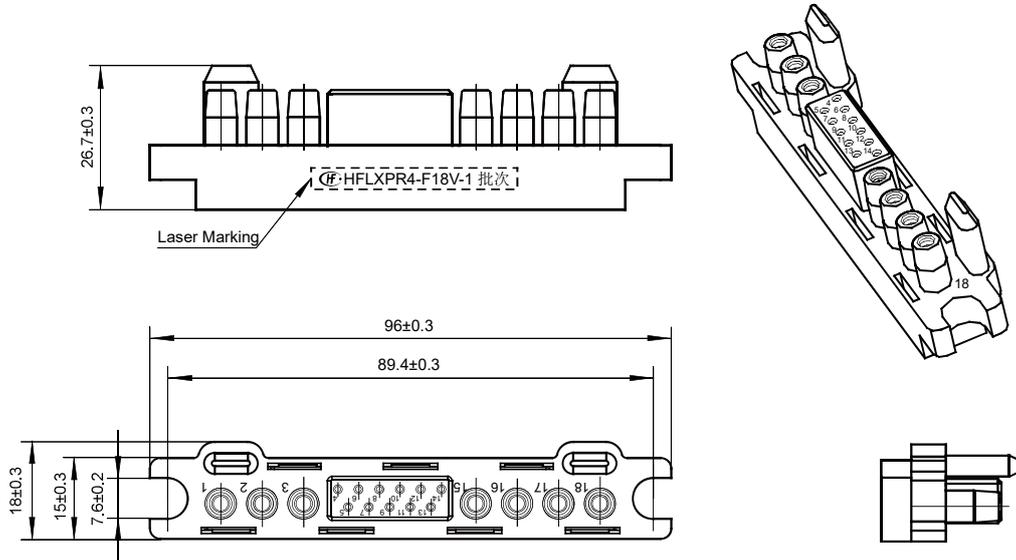
HONGFA RELAY  
ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000 CERTIFIED

2023 Rev. 1.00

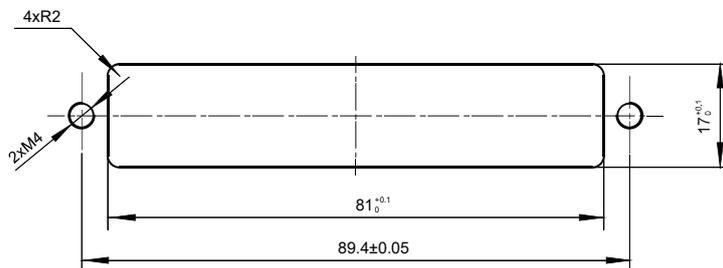
# OUTLINE DIMENSIONS AND PC BOARD LAYOUT

Unit: mm

## Outline Dimensions



## PCB Layout (Bottom view)



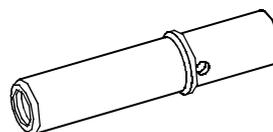
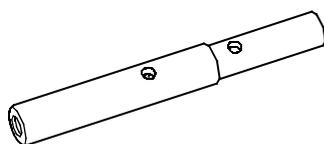
## DIMENSION OF RELATED ACCESSORY(Package delivery)

Unit: mm

### Metal Socket

$\varnothing 1.02$

$\varnothing 2.38$



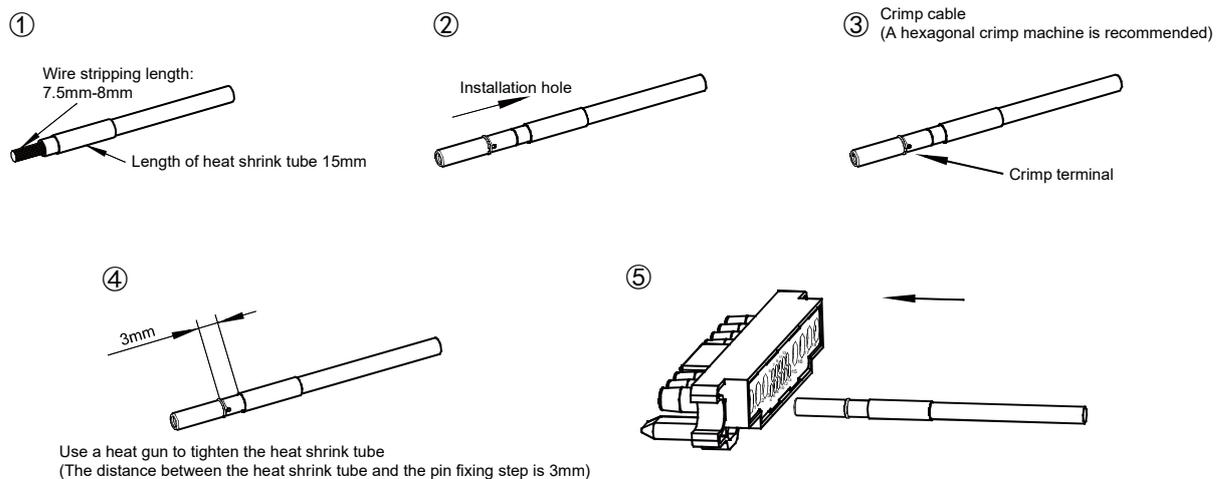
## SELECTION OF PARTS

Serial No.	Part And Components Name	Material	Finishing
1	Mounting Plate	PBT	/
2	Cover Plate	PBT	/
3	Ø1.02 Socket	Brass	Gold plated
4	Ø2.38 Socket	Brass	Silver plated
5	Ø1.0 Crown Spring	Copper Alloy	Gold plated
6	Ø2.4 Crown Spring	Copper Alloy	Silver plated
7	12# Claw	Copper Alloy	Cu/Ct-P
8	20# Claw	Copper Alloy	Cu/Ct-P

## PRECAUTIONS FOR USE

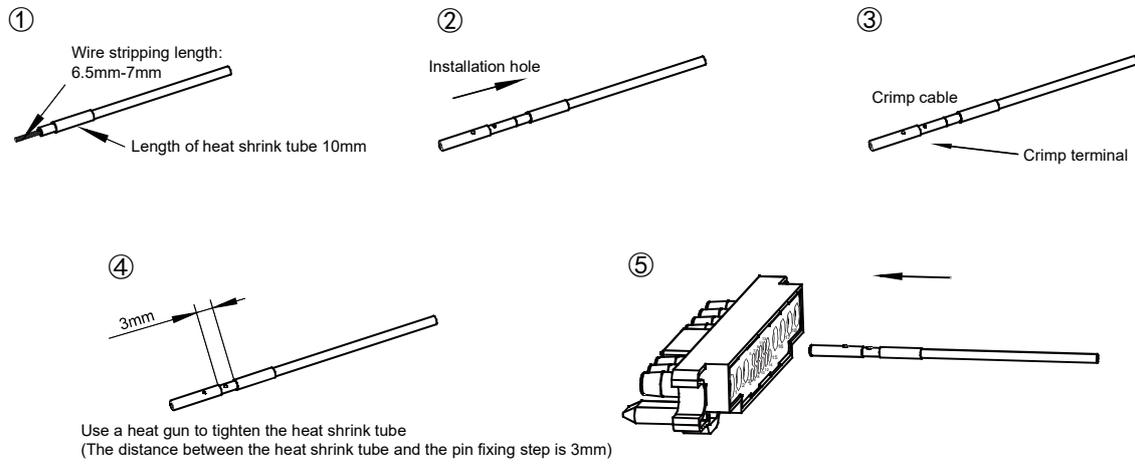
- Adapter cable:
  - Ø2.38 Installation hole: 4mm<sup>2</sup>
  - Ø1.02 Installation hole: 20AWG
  - (Recommended: flame-retardant cable with rated voltage of 300V to 600VAC and temperature resistance of 125°C);
- Recommendation for heat shrink tube:
  - Temperature Resistance ≥125°C, Voltage Resistance 2500VAC/1min, Thickness ≥0.3mm after heat shrink;
- Whether the metal jack press line is reliable, refer to the minimum pulling force requirements:
  - Ø2.38 Socket: 4mm<sup>2</sup> cable, minimum pulling force 550N
  - Ø1.02 Socket: 20AWG cable, minimum pulling force 90N
- Outside diameter of metal terminal covered with heat shrink tube after heat shrink::
  - Ø2.38 Installation hole: ≤4.6mm
  - Ø1.02 Installation hole: ≤2.4mm
- The operation process is as follows:

### Ø2.38 Installation hole ❖❖❖



## PRECAUTIONS FOR USE

### Ø1.02 Installation hole ❖❖❖



### Disclaimer

The specification is for reference only. Specifications subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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