

HyperQube 6.00mm High-Voltage, High-Current Interconnect System >

The HyperQube High-Voltage, High-Current product family is an innovative, high-performance connector system designed with our proven Coeur socket technology. This technology ensures a large conductive surface area to minimize heat generation and deliver high-current-carrying capacity to meet the demands of space-constrained applications. HyperQube interconnects meet rigorous industry standards and offer enhanced features for overall efficiency. Realize secure connections, simplified installations and optimized performance with high-power HyperQube connectors.

ADVANTAGES AND FEATURES

Achieves space savings in a compact design

The mated height (19.50mm), mated length (43.70mm) and width (17.70mm) are ideal for space-constrained applications.

Offers time savings with accurate mating

Plug housings and board mount receptacles are available in three colors to guide operators during system integration to ensure proper mating when multiple cable assemblies are used in an application.

Provides high-power density

With a current rating of 120.0A and a printed circuit board (PCB) footprint of 12.30 by 15.40mm, the HyperQube connector's power density rating is 63.4A per 1 cm² of PCB real estate.

Delivers robust electrical performance

With Molex Coeur socket technology, there is low contact resistance minimizing heat generation at the contact interface, allowing for high-current loads. The multiple contact beams make it well suited for high-shock and high-vibration applications.

Current	120.0A
Voltage	1000V
Industry Standards	UL 94V-0
Operating Temperatures	-40 to +125°C

Ensures receptacles are correctly placed and properly oriented on the PCB or busbar, eliminating manufacturing issues

The polarizing pegs' sizes and locations are unique for each board mount receptacle color option. This mechanical-keying scheme ensures board mount receptacles are properly located.

Affords design flexibility

The board mount receptacle's external thread design enables the connectors to be attached to either PCB or busbars. A wide range of crimp contacts (2, 4 and 6 AWG) are available, meeting current-carrying requirements for applications.

Offers manufacturing flexibility

The board mount receptacle's external thread design enables a PCB or busbar to be easily reworked if the connector is damaged during handling.

Provides safety for workers

As a safety feature, the socket, crimp contact and cable assembly's stripped wire leads of mated HyperQube connectors are covered. The touch-safe mated connectors help technicians avoid electrical shock.



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MARKETS AND APPLICATIONS

Data Centers

Servers
Switches

Energy Storage

Inverters

Industrial Automation

Motors



Servers



Inverters



Motors

SPECIFICATIONS

Reference Information

Packaging:

Male Crimp Pin: Bag
Receptacle Assembly: Trays
Plug Housing: Bag

UL File No.: Pending

CSA File No.: Pending

Use With: PCBs and busbars

Designed In: Millimeters

RoHS: Yes

Mechanical

Mating Force (max.): 35N
Unmating Force (min.): 4N
Durability: 200 mating cycles

Electrical

Voltage (max.): 1,000V
Current (max.): 120.0A
Contact Resistance (max.): 0.20 milliohms

Physical

Plug Housing: PBT, low halogen
Crimp Contact: Copper (Cu) Alloy
Receptacle Housing: PBT, low halogen
Receptacle Components:

Aluminum Alloy/Stainless Steel

Plating:

Socket—Gold (Au)

Pin—Silver (Ag)

PCB Thickness (max.): 2.00mm

Busbar Thickness (max.): 2.00mm

RoHS Compliant

REACH Compliant

Flammability: UL 94V-0

Operating Temperatures: -40 to +125°C

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