

Coeur CST High-Current Interconnect System

molex

Coeur CST High-Current Interconnect System delivers up to 200.0A of current through 3 diameter sizes (8.00mm, 6.00mm and 3.40mm) and offers a wide range of configurations, connecting PCBs, busbars and cables



Coeur CST High-Current 8.00mm, 6.00mm and 3.40mm Sockets and Male Pins

Features and Advantages

Capable of 30.0 to above 200.0A current rating
Offers a scalable design to meet a wide range of high-current applications

Termination methods include bus bars, PCBs and wire
Provides design flexibility for a range of high-current applications

Sockets without Float Feature

Series 204316

Series 204318



Coeur CST Socket Features

Multiple contact beams
Provide optimized electrical performance



Press-Fit

Sockets with Float Feature

SMT



Series 204313

Series 204365

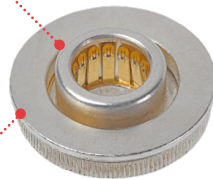
One common contact design in all CST sockets regardless of form factor sizes
Provides the same profile height even when the number of contacts varies

8.00mm SMT Socket (Series 204313)

Unique Float Feature

Core Socket with Contacts in Nominal Position

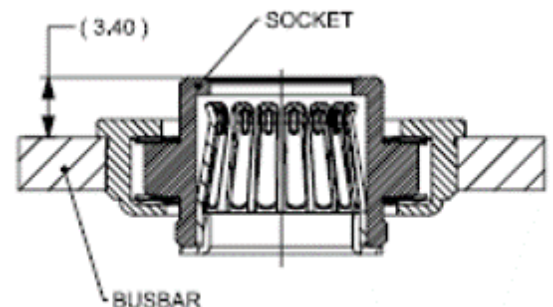
Core Socket with Contacts Fully Floated 1.00mm



Float Housing

8.00mm Press-Fit Socket

Wave springs provide float mechanism so entire core socket assembly moves within the float housing
No added stress on contacts in float position
Low mating forces
No risk of resistance increase due to high contact beam deflection



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1/0 AWG crimp contacts
For 8.0mm form factor
Makes smaller AWG possible

Terminal retention housings
Locks in contacts



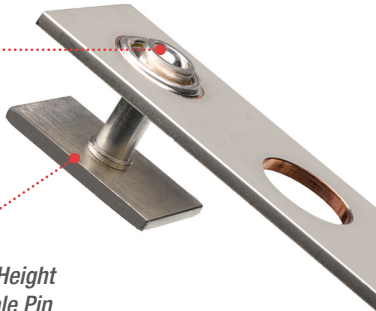
Previous housing features available

- Touch-safe feature
- Positive latching
- Vertical, PC, bus bar-mounting header

Fully shrouded female and male contacts
Touch safe. 600V rating in configuration show above

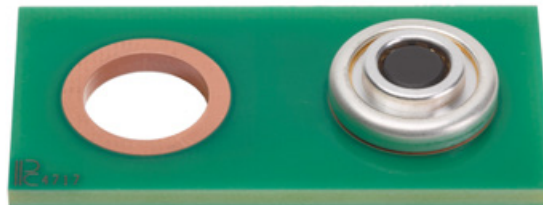
2-circuit, 8.00mm version shown is currently available. 2-circuit, 6.00mm available upon request
Plan is for a broad W-to-W/W-to-B product portfolio in all 3 sizes

Male pin does not protrude above the socket housing when mated by a top entry
Saves space above the PCB or bus bar



Board-to-Board Mated Height Changes by Varying Male Pin Length (Series 203263)

8.0mm Coeur CST Interconnector System, 2-Circuit, Wire-to-Board (Female Housing: Series 204601, 204603; Male Header: Series 204600; Male Pin: Series 203263)



Pick-and-place cap available
Enables automated SMT socket placement to PCB

Coeur CST Connector Embedded in a Bus Bar

Coeur CST Connector Mounted to a PCB

Applications

Data/Computing

- Routers
- Networking
- Storage

Telecommunications/Networking

- Servers
- Storage

Industrial

- Power Supply

Data Centers

- Servers
- Data Storage
- PDU
- UPS/Battery Storage
- Switches
- Circuit Breakers
- Instrumentation



Data Center Servers

Specifications

REFERENCE INFORMATION

Packaging: Tray, Tape, Reel and Bag
per part number see PK specs
UL File No.: E29179
CSA File No.: 70184994
Use With: Busbars and Cable Assemblies
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

PHYSICAL

Contact: High-Performance Copper (Cu) Alloy
Metal Housings/Caps: Copper (Cu) Alloy
Plating:
Contact Beams — Gold (Au) over Nickel (Ni)
Wave Springs (Float Versions) — Gold (Au) over
Nickel (Ni)
Male Pin — Silver (Ag) over Nickel (Ni)
Metal Housings / Caps — Silver (Ag) over Nickel
(Ni)
PCB Thickness (min.): 1.60mm
Bus Bar Thickness (min.): 1.50mm
Operating Temperature: -40 to +105°C

8.00MM

ELECTRICAL

Voltage: 600V
Current (max.): 200.0A
Contact Resistance: 0.20 milliohms

MECHANICAL

Contact Mating Force (max.): 40N
Contact Unmating Force (minx): 10N
Durability (min.): 200 Mating Cycles
Float Displacement Force (max.): 15N

6.00MM

ELECTRICAL

Voltage: 600V
Current (max.): 140.0A
Contact Resistance: 0.20 milliohms

MECHANICAL

Contact Mating Force (max.): 30N
Contact Unmating Force (minx): 7N
Durability (min.): 200 Mating Cycles
Float Displacement Force (max.): 10N

3.40MM

ELECTRICAL

Voltage: 600V
Current (max.): 75.0A
Contact Resistance: 0.25 milliohms

MECHANICAL

Contact Mating Force (max.): 20N
Contact Unmating Force (minx): 6N
Durability (min.): 200 Mating Cycles
Float Displacement Force (max.): 10N