# **Coeur CST** High-Current Interconnect System **molex**

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

**Features and Advantages** 



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

#### Sockets without Float Feature

Sockets with Float Feature

8.00mm SMT Socket (Series 204313)

# Capable of 30.0 to 200.0A current ratings

Offers a scalable design to meet a wide range of high-current applications



Series 204318



Coeur CST Socket Features

#### Multiple contact beams

Provide optimized electrical performance



# Termination methods include bus bars, PCBs and wire

Provides design flexibility for a range of high-current applications



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

# **Unique Float Feature**

Core Socket with Contacts in Nominal Position

Press-Fit



Core Socket with Contacts Fully Floated 1.00mm

SMT

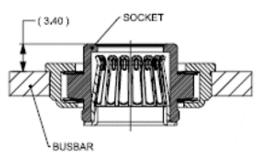


Float Housing

8.00mm Press-Fit Socket

## Float mechanism allowing for 1.00mm of float

Mitigates pin mis-alignment issues when mating Relieves added stress on contacts in float position Allows no risk of resistance increase due to high contact beam deflection Offers low mating force



# Coeur CST High-Current Interconnect System **MOlex**





# Locks in contacts



Made in smaller AWG upon request

Male pin has minimal protrusion above the socket housing when mated

Saves space above the PCB or bus bar

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

Fully shrouded female and male contacts Is touch safe and

offers 600V rating in configuration shown above

8.00mm Coeur CST Interconnector System, 2-Circuit, Wire-to-Board (Female Housing: Series 204601, 204603; Male Header: Series 204600; Male Pin: Series 203263)

Premium housing features available

· Vertical, PC, bus bar-mounting header

· Touch-safe feature

Positive latching

Keyed



Coeur CST Connector Mounted to a PCB

Pick-and-place cap on **SMT** sockets

socket placement to PCB



Coeur CST Connector

# **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** 

**Enables automated SMT** 

# Coeur CST High-Current Interconnect System



# **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

#### 8.00MM ELECTRICAL

Voltage: 600V, B-T-B and W-T-B Current (max.): 200.0A

Contact Resistance: 0.20 milliohms

#### **MECHANICAL**

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

#### **PHYSICAL**

Contact: High-Performance Copper (Cu) Alloy Metal Housings: Copper (Cu) Alloy

Plastic Housings: PBT Plastic Caps: LCP

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)

Bus Bar Thickness (min.): 1.50mm Operating Temperature: -40 to +105°C

PCB Thickness (min.): 1.60mm

#### 6.00MM ELECTRICAL

Voltage: 600V, B-T-B; 300V, W-T-B

Current (max.): 140.0A

Contact Resistance: 0.20 milliohms

#### **MECHANICAL**

Contact Mating Force (max.): 30N Contact Unmating Force (min.): 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 (min.): 6N Durability (min.): 200 Mating Cycles Float Displacement Force (max.): 10N

# **Ordering Information**

Series No.	Component	Termination Method	Float Feature
<u>204365</u>	- Female Socket	OMT to DOD	Yes
<u>204318</u>		SMT to PCB	No
<u>204313</u>		Danes Fit to Dunkey	Yes
<u>204316</u>		Press-Fit to Busbar	No
<u>203263</u>	Male Pin	Press-Fit/SMT/Screw	No

Board-to-Board Series	Description	Size (mm)	Circuits
<u>212195</u>	Famala Caalkat	All	
212194	Female Socket	All	
214336	Male Pin	3.40	2
214337		6.00	
<u>211922</u>		8.00	

Custom Product	Description	
Contact Molex	Coeur CST Custom Pins and Housings	

Wire-to-Board Series	Description	Size (mm)	Circuits
<u>211937</u>	Header		
211942	Receptacle Housing	6.00	
211888	Retainer		
204600	Header		2
204601	Receptacle Housing	8.00	
204603	Retainer		
204608	Crimp Socket	6.00 and 8.00	

www.molex.com/link/coeur.html