FEATURES AND SPECIFICATIONS

EXTreme Power-Mass™ High-Current Connector

Board-to-Board Applications

75555, 75556, 75561, 46081, 75568 Right-Angle Plug Assembly
75541, 75542, 75545, 46079, 75548 Vertical Receptacle Assembly
45840 Right-Angle Receptacle

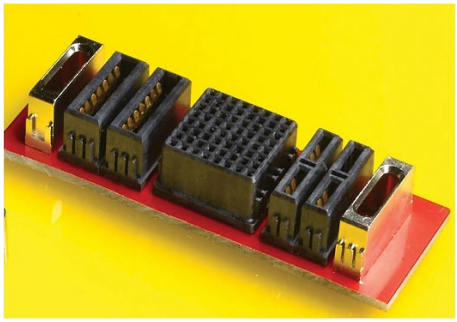
High-current, custom configurable, board-to-board connector system delivers up to 350.0A per inch

Intensifying our approach to provide high-current density and a customer-configurable design, EXTreme Power-Mass offers a nearly unlimited range of power and signal module-design options, providing customer-specific interconnect solutions for AC and DC power requirements. EXTreme Power-Mass is a high-current, board-to-board, modular connector system, providing 350.0A per inch.

EXTreme Power-Mass is designed to support power supplies and systems requiring very high-current transfer in challenging thermal-constrained spaces. EXTreme Power-Mass complements Molex's robust EXTreme power-connector family offering. For more information on Molex power connectors, visit: www.molex.com/product/power.html.

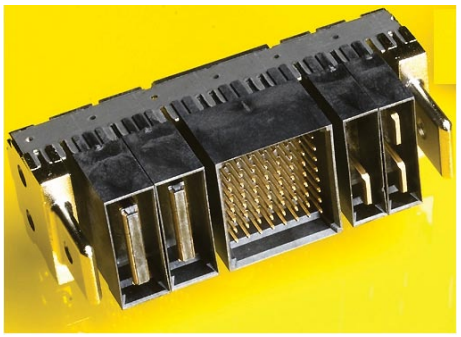
Features and Benefits

- Multiple power (150.0A, 80.0A, 40.0A) and signal (24 to 64 circuits) modules available to provide maximum flexibility for customer design requirements
- 350.0A per inch current density is one of the highest capacity board-to-board power connectors on the market
- Less than 1 milliohm resistance (plane-to-plane) at end-of-life provides minimum heat generation with maximum current transfer
- Press-fit and solder-board termination for easy and reliable PCB mounting options
- Die-cast or plastic guides provide rugged blind-mating capabilities
- Modules assembled to metal stiffener to assure true position and flexible module placement
- Sequential power-blade and signal-pin lengths facilitates post-mate and pre-mate options



Right-Angle Plug Assembly (Series 75555)

Vertical Socket Assembly (Series 75541)



Right-Angle Receptacle (Series 45840)

APPLICATIONS

Markets and Applications

Typically used for power supply to system board power delivery in:

- Telecommunications
- Networking switches and routers
- High and mid-range computing
- Servers
- Data storage
- Power supplies)
- Cellular communications
- Base stations

Router

SPECIFICATIONS

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Reference Information

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: Pending

Designed In: Millimeters

Electrical

Voltage:

Signal Module: 250V

150.0A Module: 600V

Multi-Path:

80.0A Module: 450V

40.0A Module: 600V

Current (@ 30° C Temperature rise):

Signal Module: 3.0A per circuit (24 to 64 circuits)

150.0A Module: 150.0A

Multi-Path: 40.0A per circuit (4 circuits)

80.0A Module: 40.0A per circuit (2 circuits)

40.0A Module: 40.0A

Contact Resistance (milliohms per blade):

	Initial	Delta	End of Life
Signal Module –	10.0	10.0	20.0
Multi-Path –	0.55	0.75	1.30
150.0A Module –	0.16	0.25	0.41
80.0A Module –	0.55	0.75	1.30
40.0A Module –	0.55	0.75	1.30

Dielectric Withstanding Voltage: No breakdown

Insulation Resistance: 5000 Megohms min.

Mechanical

Mating Force:

Signal Module: 120g (.264 lb) per pin

150.0A Module: 2600g (5.732 lb)

Multi-Path: 2920g (6.437 lb)

80.0A Module: 1460g (3.218 lb)

40.0A Module: 730g (1.609 lb)

Un-mating Force :

Signal Module: 65g (.143 lb)

150.0A Module: 1720g (3.791 lb)

Multi-Path: 1600g (3.527 lb)

80.0A Module: 800g (1.763 lb)

40.0A Module: 400g (.881 lb)

Contact Retention: 225g (.496 lb)

Durability: 50 cycles

Physical

Housing: LCP

Contact: Copper (Cu) Alloy

Plating:

Contact Area – 30µ" Gold (Au) min.

Solder Tail Area – 150µ" Tin (Sn) min.

Underplating – 50µ" Nickel (Ni) min.

Operating Temperature: -40 to +105°C

Flammability Rating: 94V-0

ORDERING INFORMATION

Connector Assembly

Order No.	Component	Orientation	Mounting Style	Comments
75555-2001	Plug	Right Angle	Solder Tail	For sales drawing reference only
75555-XXXX				
75541-2001	Receptacle	Vertical	Press-Fit	
75541-XXXX				
45840-2001		Right Angle	Solder Tail	
45840-XXXX				

Note: Connector assemblies are customer specific. Please contact Molex's inside sales department for details.

ORDERING INFORMATION

EXTreme Power-Mass™ High-Current Connector
Board-to-Board Applications

Right-Angle

Order No.	Current Rating	Circuit	Mount Type	Comment
75556-5000	150.0	1	Solder	Long Blade
75556-5100				Short Blade
75561-5000	80.0	2		Two, 40.0A blades
75561-5100	40.0	1		Single, 40.0A blade
46081-2000	Signal	4		Multi Path (Four, 40.0A blades)
75568-5000		64		-
75568-5056		56		-
75568-5048		48		-
75568-5040		40		-
75568-5032		32		-
75568-5024		24		-

Vertical Receptacles

Order No.	Current Rating	Circuit	Mount Type	Comment
75542-5000	150.0A	1	Press Fit	-
75545-5000	80.0A	2		Two, 40.0A blades
75545-5100	40.0A	1		Single, 40.0A blade
46079-1000	Signal	4		Multi Path (Four, 40.0A blades)
75548-6000		64		-
75548-6056		56		-
75548-6048		48		-
75548-6040		40		-
75548-6032		32		-
75548-6024		24		-

Right-Angle Receptacles

Order No.	Current Rating	Circuit	Mounting Style	Comments
46225-5024	Signal	24	Solder	-
45841-5000	150.0A	1		-

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Visit our website at www.molex.com/product/power/ext-pwmass.html

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http://moschip.ru/get-element

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