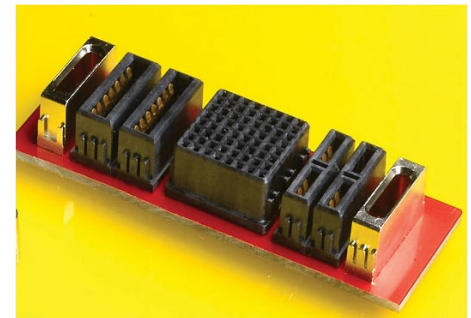




## EXTreme Power-Mass™ High-Current Connector Board-to-Board Applications

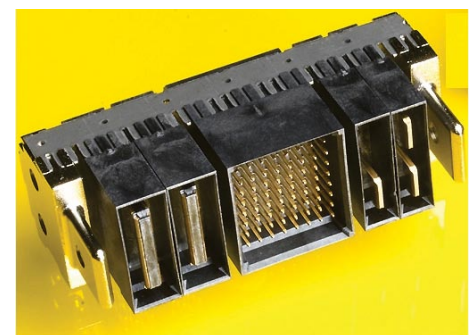
**75555, 75556, 75561, 46081,  
75568 Right-Angle Plug Assembly**  
**75541, 75542, 75545, 46079,  
75548 Vertical Receptacle Assembly**  
**45840 Right-Angle Receptacle**



Right-Angle Plug Assembly (Series 75555)



Vertical Socket Assembly (Series 75541)



Right-Angle Receptacle (Series 45840)

*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](http://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

### 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



# 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**

### 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.OA Module: 600V

Multi-Path:

80.OA Module: 450V

40.OA Module: 600V

Current (@ 30° C Temperature rise):

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

150.OA Module: 150.OA

Multi-Path: 40.OA per circuit (4 circuits)

80.OA Module: 40.OA per circuit (2 circuits)

40.OA Module: 40.OA

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.OA Module –	0.16	0.25	0.41
80.OA Module –	0.55	0.75	1.30
40.OA 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.OA Module: 2600g (5.732 lb)

Multi-Path: 2920g (6.437 lb)

80.OA Module: 1460g (3.218 lb)

40.OA Module: 730g (1.609 lb)

Un-mating Force :

Signal Module: 65g (.143 lb)

150.OA Module: 1720g (3.791 lb)

Multi-Path: 1600g (3.527 lb)

80.OA Module: 800g (1.763 lb)

40.OA 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.



### 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		-

**Americas Headquarters**  
 Lisle, Illinois 60532 U.S.A.  
 1-800-78MOLEX  
 amerinfo@molex.com

**Asia Pacific North Headquarters**  
 Yamato, Kanagawa, Japan  
 81-462-65-2325  
 apninfo@molex.com

**Asia Pacific South Headquarters**  
 Jurong, Singapore  
 65-6268-6868  
 fesinfo@molex.com

**European Headquarters**  
 Munich, Germany  
 49-89-413092-0  
 eurinfo@molex.com

**Corporate Headquarters**  
 2222 Wellington Ct.  
 Lisle, IL 60532 U.S.A.  
 630-969-4550  
 Fax: 630-969-1352

Visit our website at [www.molex.com/product/power/ext-pwmass.html](http://www.molex.com/product/power/ext-pwmass.html)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.