



## 2.50mm (.098") Pitch Signal and 12.90mm (.508") Pitch Power Contacts Power Edge™ Connector

- 45844** Signal Vertical Assembly, Solder Tails
- 45845** Signal Vertical Assembly, Press-Fit Tails
- 45911** Mixed-Power and Signal Assembly, Solder Tails
- 45912** Mixed-Power and Signal Assembly, Press-Fit

### Power Edge connectors with signal contacts for combined high-power and signal card edge or bus bar tab applications

Power Edge connectors are designed for direct mating to a customer's 1.58mm (.062") thick, double-sided card edge PCB or bus bar tab. Molex expands the existing Power Edge family to include assemblies with signal circuits rated up to 3.0A per contact.

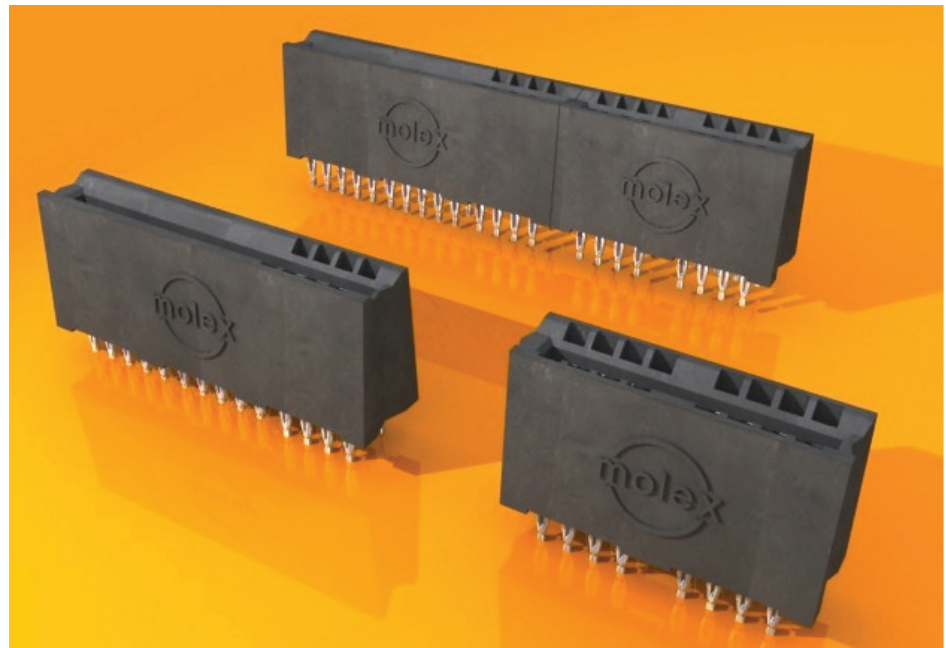
The signal contacts permit Power Edge connector mating with a combination of power and signal traces on a double-sided card edge. The addition of the signal circuits have been incorporated into assemblies with signal segments only and mixed power and signal segments. The signal only assemblies are available in 2, 3 and 4 segment connectors, consisting of 8 signal

circuits per segment, in either solder or press-fit pc tail versions. The mixed-power and signal assemblies are available in 2, 3 and 4 segment connectors with power and signal segments contained in the same assembly, available in either solder or press-fit pc tail versions.

For detailed information Molex's robust Power Edge Connector offering, visit [www.molex.com/product/power/power\\_edge.html](http://www.molex.com/product/power/power_edge.html).

### Features and Benefits

- Connector assemblies available in 2, 3 and 4 segments of signal circuits or mixed power and signal circuits to ensure greater flexibility for signal or mixed-power and signal card edge applications
- Isolated contacts on opposite side of connector assembly segments allow for connector combinations of 8 independent signal circuits per segment or 2 independent 40.0A power circuits
- End-to-end stackable design allows for variations of power, signal or mixed-power and signal connectors to be stacked end-to-end to mate with double-sided card edge lengths up to 203.20mm (8.000"). (Power segments can be used for bus bar terminations.)
- Press-fit or solder-tail terminations are compatible with standard PCBs or backplanes
- Power contacts are rated for current interruption to match true hot-plugging requirements
- Compatible with competitive connector to ensure a drop-in replacement plus Molex Power Edge offers 20% greater current



## SPECIFICATIONS

### Reference Information

Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: 1482777 (LR 19980)  
 TUV File No.: R72042763  
 Mates With: Customers .062" (1.58mm) Thick Card Edge or Bus Bar Tab  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current: 40.0A per power contact and 3.0A per signal contact  
 Contact Resistance:  
     Power — 1 milliohm max.  
     Signal — 15 milliohms max.  
 Dielectric Withstanding Voltage: 1500VDC  
 Insulation Resistance: 5000 Megohms min.

### Mechanical

Mating Force:  
     Power — 8.8N (1.97 lbf) per segment  
     Signal — 1.4N (.31 lbf) per contact  
 Unmating Force:  
     Power — 4.4N (.98 lbf) per segment  
     Signal — 0.14N (.03 lbf) per contact  
 Durability: 25 mating cycles

### Physical

Housing: 30% Glass Filled LCP  
 Contact: Copper (Cu) Alloy  
 Plating:  
     Contact Area — Select Gold (Au)  
     Solder Tail Area — Tin (Sn)  
     Underplating — Nickel (Ni)  
 PCB Thickness: See ordering information section  
 Operating Temperature: -40 to +105°C

## APPLICATIONS

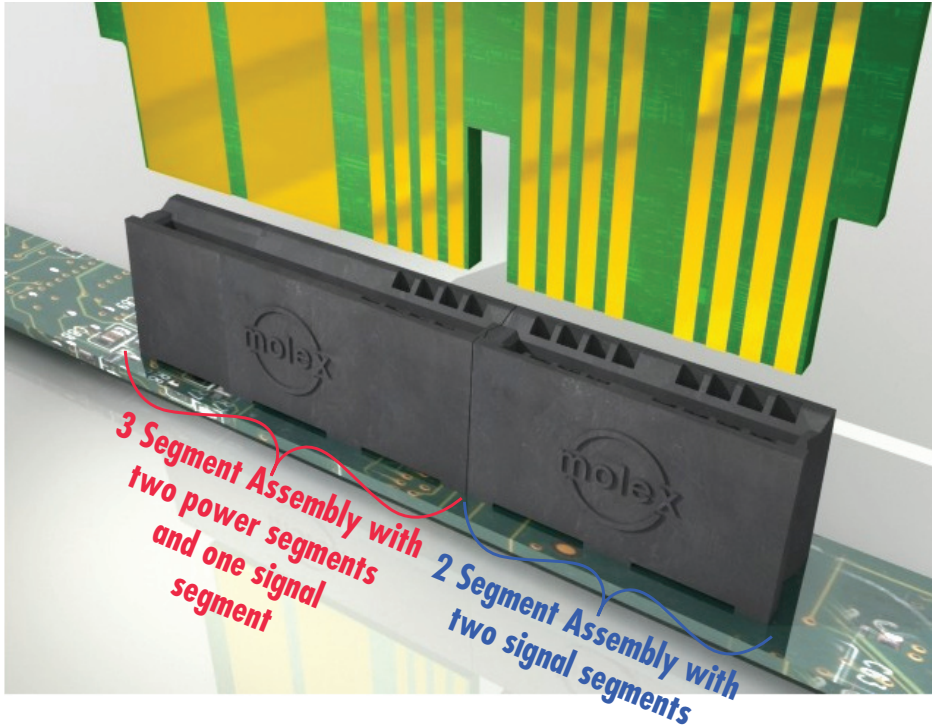


# 2.50mm (.098") Pitch Signal and 12.90mm (.508") Pitch Power Contacts Power Edge™ Connector

- Telecommunication  
- Networking switches and routers
- High and mid-range computing  
- Servers
- Power Supplies

- Cellular Communications  
- Base stations
- Any application where a one-piece power and signal connector combination is required

- 45844** Signal Vertical Assembly, Solder Tails
- 45845** Signal Vertical Assembly, Press-Fit Tails
- 45911** Mixed-Power and Signal Assembly, Solder Tails
- 45912** Mixed-Power and Signal Assembly, Press-Fit



## ORDERING INFORMATION

Order No.	Segments	*Circuits Detail	PCB Termination Type	PCB Thickness	
45844-0001	2	8 Signal, 8 Signal	Through-Hole Solder Tails	2.36mm (.093") or 3.18mm (.125")	
45844-0002	3	8 Signal, 8 Signal, 8 Signal			
45844-0003	4	8 Signal, 8 Signal, 8 Signal, 8 Signal			
45844-0004	2	8 Signal, 8 Signal		Press-Fit (Compliant Pin)	1.57mm (.062")
45844-0005	3	8 Signal, 8 Signal, 8 Signal			
45844-0006	4	8 Signal, 8 Signal, 8 Signal, 8 Signal			
45845-0001	2	8 Signal, 8 Signal	2.36mm (.093") or Greater		
45845-0002	3	8 Signal, 8 Signal, 8 Signal			
45845-0003	4	8 Signal, 8 Signal, 8 Signal, 8 Signal	Through-Hole Solder Tails	2.36mm (.093") or 3.18mm (.125")	
45911-0001	2	2 Power, 8 Signal			
45911-0002		8 Signal, 2 Power			
45911-0003		2 Power, 8 Signal			
45911-0004		2 Signal, 8 Power			
45911-0007	3	2 Power, 2 Power, 8 Signal			2.36mm (.093") or 3.18mm (.125")
45911-0008		2 Power, 8 Signal, 2 Power			
45911-0009		2 Power, 8 Signal, 8 Signal			
45911-0010		8 Signal, 2 Power, 8 Signal			
45911-0011		8 Signal, 8 Signal, 2 Power			
45911-0012		8 Signal, 2 Power, 2 Power		1.57mm (.062")	
45911-0013		2 Power, 2 Power, 8 Signal			
45911-0014		2 Power, 8 Signal, 2 Power			
45911-0015		2 Power, 8 Signal, 8 Signal			
45911-0016		8 Signal, 2 Power, 8 Signal			
45911-0017		8 Signal, 8 Signal, 2 Power			
45911-0018		8 Signal, 2 Power, 2 Power			

\*Segment sequence in order as noted on the sales drawing.



# 2.50mm (.098") Pitch Signal and 12.90mm (.508") Pitch Power Contacts Power Edge™ Connector

Order No.	Segments	*Circuits Detail	PCB Termination Type	PCB Thickness		
45911-0025	4	2 Power, 2 Power, 2 Power, 8 Signal	Through-Hole Solder Tails	2.36mm (.093") or 3.18mm (.125")		
45911-0026		2 Power, 2 Power, 8 Signal, 2 Power				
45911-0027		2 Power, 2 Power, 8 Signal, 8 Signal				
45911-0028		2 Power, 8 Signal, 2 Power, 8 Signal				
45911-0029		2 Power, 8 Signal, 8 Signal, 2 Power				
45911-0030		2 Power, 8 Signal, 2 Power, 2 Power				
45911-0031		2 Power, 8 Signal, 8 Signal, 8 Signal				
45911-0032		8 Signal, 2 Power, 2 Power, 8 Signal				
45911-0033		8 Signal, 2 Power, 8 Signal, 8 Signal				
45911-0034		8 Signal, 2 Power, 8 Signal, 8 Signal				
45911-0035		8 Signal, 8 Signal, 2 Power, 8 Signal				
45911-0036		8 Signal, 8 Signal, 8 Signal, 2 Power				
45911-0037		8 Signal, 8 Signal, 2 Power, 2 Power				
45911-0038		8 Signal, 2 Power, 2 Power, 2 Power				
45911-0039		2 Power, 2 Power, 2 Power, 8 Signal				
45911-0040		2 Power, 2 Power, 8 Signal, 2 Power				
45911-0041		2 Power, 2 Power, 8 Signal, 2 Signal				
45911-0042		2 Power, 8 Signal, 2 Power, 2 Power				
45911-0043		2 Power, 8 Signal, 8 Signal, 2 Power				
45911-0044		2 Power, 8 Signal, 2 Power, 2 Power				
45911-0045		2 Power, 8 Signal, 8 Signal, 8 Signal				
45911-0046		8 Signal, 2 Power, 2 Power, 8 Signal				
45911-0047		8 Signal, 2 Power, 8 Signal, 2 Power				
45911-0048		8 Signal, 2 Power, 8 Signal, 8 Signal				
45911-0049		8 Signal, 8 Signal, 2 Power, 8 Signal				
45911-0050		8 Signal, 8 Signal, 8 Signal, 2 Power				
45911-0051		8 Signal, 8 Signal, 2 Power, 2 Power				
45911-0052		8 Signal, 2 Power, 2 Power, 2 Power				
45912-0001		2		2 Power, 8 Signal	Press-Fit (Compliant Pin)	2.36mm (.093") or Greater
45912-0002				8 Signal, 2 Power		
45912-0007		3		2 Power, 2 Power, 8 Signal		
45912-0008				2 Power, 8 Signal, 2 Power		
45912-0009	2 Power, 8 Signal, 2 Signal					
45912-0010	8 Signal, 2 Power, 8 Signal					
45912-0011	8 Signal, 8 Signal, 2 Power					
45912-0012	8 Signal, 2 Power, 2 Power					
45912-0025	4	2 Power, 2 Power, 2 Power, 8 Signal				
45912-0026		2 Power, 2 Power, 8 Signal, 2 Power				
45912-0027		2 Power, 2 Power, 8 Signal, 8 Signal				
45912-0028		2 Power, 8 Signal, 2 Power, 8 Signal				
45912-0029		2 Power, 8 Signal, 8 Signal, 2 Power				
45912-0030		2 Power, 8 Signal, 2 Power, 2 Power				
45912-0031		2 Power, 8 Signal, 8 Signal, 8 Signal				
45912-0032		8 Signal, 2 Power, 2 Power, 8 Signal				
45912-0033		8 Signal, 2 Power, 8 Signal, 2 Power				
45912-0034		8 Signal, 2 Power, 8 Signal, 8 Signal				
45912-0035		8 Signal, 8 Signal, 2 Power, 8 Signal				
45912-0036		8 Signal, 8 Signal, 8 Signal, 2 Power				
45912-0037		8 Signal, 8 Signal, 2 Power, 2 Power				
45912-0038		8 Signal, 2 Power, 2 Power, 2 Power				

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

**Far East North Headquarters**  
Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

**Far East South Headquarters**  
Jurong, Singapore  
65-6-268-6868  
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/power\\_edge.html](http://www.molex.com/product/power/power_edge.html)