#### FEATURES AND SPECIFICATIONS



# 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

#### **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

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.

## 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



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**

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



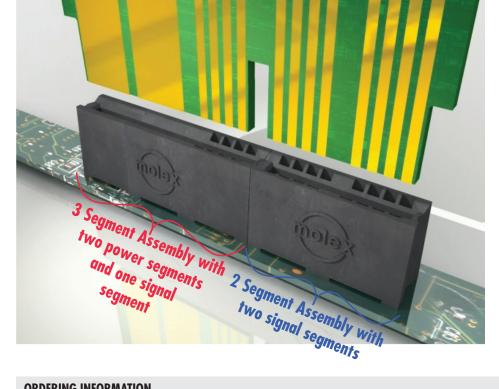
- Cellular Communications - Base stations
- Any application where a one-piece power and signal connector combination is required



45844 Signal Vertical Assembly, Solder Tails

2.50mm (.098") Pitch Signal

- 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		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	Press-Fit (Compliant Pin)	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		
45911-0001	2	2 Power, 8 Signal	Through-Hole Solder Tails	2.36mm (.093") or 3.18mm (.125")
45911-0002		8 Signal, 2 Power		
45911-0003		2 Power, 8 Signal		1.57mm (.062")
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		
45911-0013		2 Power, 2 Power, 8 Signal		1.57mm (.062″)
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		2 Power, 2 Power, 2 Power, 8 Signal	Through-Hole Solder Tails	2.36mm (.093") or 3.18mm (.125") 1.57mm (.062")
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, 2 Power		
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	4	2 Power, 2 Power, 2 Power, 8 Signal		
45911-0040		2 Power, 2 Power, 2 Power, 8 Signal, 2 Power		
45911-0041				
45911-0042		2 Power, 2 Power, 8 Signal, 2 Signal		
		2 Power, 8 Signal, 2 Power, 2 Power		
45911-0043 45911-0044		2 Power, 8 Signal, 8 Signal, 2 Power		
		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	-	2 Power, 2 Power, 8 Signal		
45912-0008		2 Power, 8 Signal, 2 Power		
45912-0009	3	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		

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