

#### High Current Connector For Direct Mating To Card Edge PCB Or Bus Bar Tabs for Power Applications Up To 40.0A

Power Edge is a high current connector for direct mating to a customer's 1.58mm (.062") thick, doublesided card edge PCB or bus bar tab. Power Edge connectors can be combined (stacked end-to-end) to mate with multiple bus bar tabs or card edges up to 8.00" (203.20mm) for power distribution applications.

The Power Edge contact incorporates proven Molex design elements of high performance Copper Alloy and optimum mating with double-sided card edge contacts. The Power Edge contact is rated for currents up to 40.0A, offering a 25% higher current rating compared to competing connectors. The additional current provides the customer with an increased power or safety factor for their application. Power Edge uses the same PCB footprint and is end-to-end stackable with competing products.

# Gold plating, with redundant interface points for

## Isolated segments on opposing contacts provide

option for different power voltage levels on either

side of the board; for example, ground return on

- one side and power return on the other side Press-fit or solder tail terminations are compatible with standard PCB's or Backplanes
- Rated for current interruption matches true hotplugging capabilities
- Compatible with competitive connector allows dropin replacement

### 12.90mm (.508") Pitch **Power Edge**™ **Power Connector**

45714 Vertical Assembly, **Press-Fit Tails** 45719 Vertical Assembly, **Solder Tails** 



#### Features and Benefits

- Connector assemblies available in two, three and four segments (two contacts per segment) provide greater flexibility for power distribution applications
- End-to-end stackable segments provide greater flexibility for card edge requirements up to 203.20mm (8.00") in length
- 40.0A current rating per contact for high current requirements, 25% more current per contact than competing headers

#### **SPECIFICATIONS**

#### **Reference Information**

Packaging: Tray UL File No.: E29179 CSA File No.: Pending TUV File No.: Pending

Mates With: Customer's .062" Thick Card Edge or

Bus Bar Tab **Designed In: Millimeters** 

#### **Electrical**

Voltage: 250V

Current: 40.0A per contact Contact Resistance:  $1 \text{ m}\Omega$  max.

Dielectric Withstanding Voltage: 1500VDC Insulation Resistance: 5000 M $\Omega$  min.

#### Mechanical

**Mating Force:** 

2 segment assembly — 22.2N

3 segment assembly - 26.7N

4 seament assembly — 35.6N

**Unmating Force:** 

2 segment assembly — 12.3N

3 segment assembly - 22.2N

4 segment assembly — 31.1N

Durability: 200 mating cycles

#### **Physical**

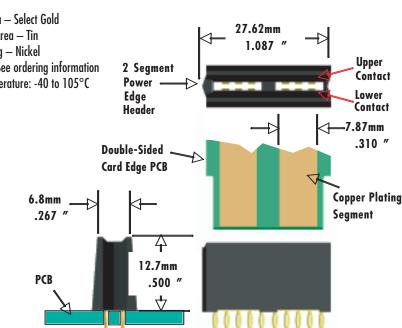
Housing: 30% Glass Filled LCP Contact: Copper Allov

Platina:

Contact Area — Select Gold Solder Tail Area — Tin

Underplating — Nickel

PCB Thickness: See ordering information Operating Temperature: -40 to 105°C



#### **APPLICATIONS**



12.90mm (.508") Pitch **Power Edge™ Power Connector** 

**Press-Fit Tails** 45719 Vertical Assembly,

- 45714 Vertical Assembly,
- **Solder Tails**



Power Edge Connectors Mating to Bus Bar Tabs

#### **■** Telecommunications Equipment

- Networking Hubs
- Switches
- Routers
- High and Mid-Range Computing Equipment
- Un-interruptible Power Supplies (UPS)
- Cellular Communications Equipment
  - Base Stations
- DC-DC Converters

#### **ORDERING INFORMATION**

Order No.	Segments	PCB Termination Type	PCB Thickness
45714-0001	2	Press Fit (Compliant Pin)	.093" (2.36mm) or Greater
45714-0002	3	Press Fit (Compliant Pin)	.093" (2.36mm) or Greater
45714-0003	4	Press Fit (Compliant Pin)	.093" (2.36mm) or Greater
45719-0001	2	Through Hole Solder Tails	.125" (3.18mm) Max.
45719-0002	3	Through Hole Solder Tails	.125" (3.18mm) Max.
45719-0003	4	Through Hole Solder Tails	.125" (3.18mm) Max.
45719-0004	2	Through Hole Solder Tails	.093" (2.36mm) Max.
45719-0005	3	Through Hole Solder Tails	.093" (2.36mm) Max.
45719-0006	4	Through Hole Solder Tails	.093" (2.36mm) Max.
45719-0007	2	Through Hole Solder Tails	.062" (1.57mm) Max.
45719-0008	3	Through Hole Solder Tails	.062" (1.57mm) Max.
45719-0009	4	Through Hole Solder Tails	.062" (1.57mm) Max.