

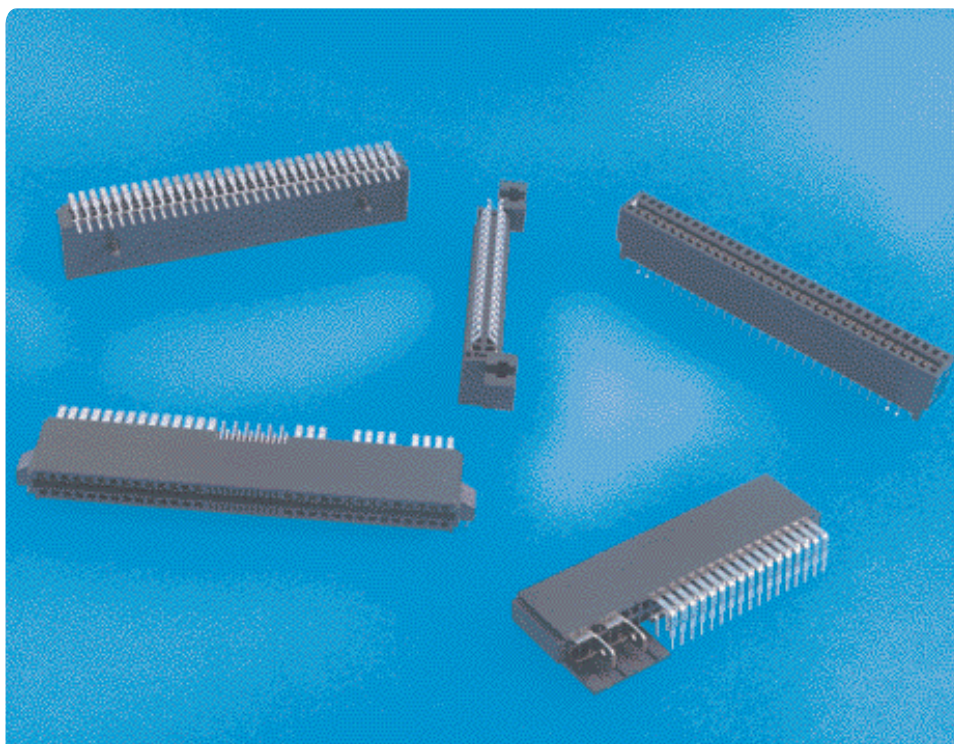
POWER CARD EDGE

DESCRIPTION

Power Card Edge connectors are a cost-effective system that can be used for DC power output from embedded AC/DC power supplies or for power distribution between boards within an enclosure. The narrow connector body helps maximize airflow for increased cooling and is well-suited for use in 1U rack-mount servers or on power distribution boards inside 1U redundant power supply assemblies.

Adjacent power contacts are positioned on 2.54mm pitch along the card edge. Power contacts are manufactured using a high-conductivity copper alloy. Each power contact is rated for up to 7A current measured at 30°C temperature rise in still air. Signal contacts are positioned on 1.27mm pitch.

The connector range includes options for right-angle, vertical, or straddle-mount solder termination with a full complement of power contacts. Right-angle options also include versions that combine power and power control signal contacts or power contacts and an integrated AC pass-through port in a single connector.



FEATURES & BENEFITS

- One-piece card edge design provides cost-effective power delivery with capacity for up to 7A per power contact
- Narrow connector body enables use in 1U servers and power supplies
- Low-profile design helps maximize airflow for system cooling
- Option for integration of signals and power in a single right-angle connector supports both power control and power distribution
- Integrated connector design simplifies board assembly
- Right-angle product range includes versions with molded posts or metal fork-locks for retention
- Straddle-mount connectors feature mounting ears for secure PCB attachment
- An optional AC cable port enables a cable pass-through solution
- RoHS compatible design enables compliance with environmental regulations

TARGET MARKETS / APPLICATIONS

- Servers
- Storage
- Telecommunications
- Datacom / Networking

TECHNICAL INFORMATION

MATERIALS

- Housing: high-temperature thermoplastic (UL94V-0), black
- Contact base metal:
 - Power – high-conductivity copper alloy
 - Signal – copper alloy
- Contact area finish: gold over nickel
- Solder area finish: matte pure tin over nickel

ELECTRICAL PERFORMANCE

- Current rating: 7A/power contact measured at 30°C temperature rise in still air
- Insulation resistance: 5000 MΩ minimum for power contact
- Withstanding voltage: 1000V AC for power contact
- Contact resistance:
 - Right-angle: 55 mΩ maximum
 - Straddle-mount: 20 mΩ maximum
 - Vertical: 20 mΩ maximum

MECHANICAL PERFORMANCE

- Durability: 200 mating/un-mating cycles
- Insertion force for an add-in board:
 - Right-angle: 13.62 kg maximum
 - Vertical or straddle-mount: 8.0 kg maximum
- Operating temperature range: -5°C to +105°C

SPECIFICATIONS

- Right-Angle Product Specification: GS-12-259
- Vertical Product Specification: GS-12-338
- Straddle-Mount Product Specification: GS-12-279

APPROVALS AND CERTIFICATIONS

- UL ,CSA and TUV approved

PACKAGING

- Trays

PART NUMBERS

Right Angle Solutions	
Description	Base Number
5 power + 12 signal + 5 power	10028886
7 power + 12 signal + 7 power	
10 power + 12 signal + 10 power	
14 power + 12 signal + 14 power	
With AC Power port	10055090
2x14, 2x17, 2x22, 2x25, 2x28, 2x29, 2x31, 2x32 power	10035388
Vertical Solutions	
Description	Base Number
2x19, 2x31, 2x32, 2x35 power	10046971
2x8 power	10046972
Straddle-Mount Options	
Description	Base Number
2x19, 2x23 power	10034908

Use the base numbers to reference the product drawings to obtain detailed dimensions and complete part numbers.

Use web link www.fciconnect.com/powercardedge to obtain product drawings and additional technical information.