MultiCat High-Power Connector System with Precision-Machined Contacts

Compact MultiCat High-Power Connectors with Precision-Machined Contacts can be mated quickly, ensure superior durability and proper connection via connector position assurance (CPA) making it effective in multiple industry categories

Features and Advantages

- Lightweight and compact wire-to-wire (W-to-W), wire-to-board (W-to-B) configuration. Accommodates up to 8 and 18 AWG wire, 3- and 4-circuit circular and inline available
  - Offers design flexibility. Ideal for use in applications with space and weight constraints

- -40 to +150°C operating temperature range
  - Enables use in harsh-temperature environments

- 3-circuit circular components available
  - Provides a compact connector that fits in an area as small as a 15.30mm-diameter tube

- UL1977 finger-test-certified receptacle
  - Meets safety standards for many consumer applications. Reduces risk of contact with live terminals

- 2-piece hermaphroditic backshell
  - Secure cable. Provides strain relief. Easy access to actuate CPA

- Patent-pending visual connector position assurance (CPA) feature
  - Visual assurance that connector is properly engaged
  - Latch provides audible feedback
  - Completely mated systems allow the CPA to actuate
  - Cannot throw CPA if system is not completely mated
  - Prevents accidental latch disengagement

- 2 keying options; 2 housing color options
  - (black and gray). Polarization incorporated into latch
  - Eliminates assembly errors. Removes need for separate polarizing tabs

- Manual mating / unmating
  - Facilitates quick assembly. Prevents mis-mating
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Features and Advantages For Precision-Machined Contacts

Mating cycles at least 500
- Provides longer life.
- Withstands high-mating cycle applications

High-current: 16.0 to 40.0A per contact
- Delivers design flexibility for high-current applications

Solid mass contact
- Provides reliability and long life cycle.
- Resistant to damage in blind-mate applications. Supports high power.
- Low contact resistance (≤ 1 milliohms)
  - Offers large mating surface to support maximum current-carrying capacity. Transfers more power than stamped contact in a smaller interface

Mechanical
- Contact Insertion Force into Housing (max.): 40N
- Contact Retention to Housing (min.): 175N
- Latch Strength (min.): 200N
- Mating Force (max.): 24N per Circuit
- Unmating Force (min.): 5N per Circuit
- Durability (max.): 500 cycles

Electrical
- Voltage (max.): 1000V AC/DC
- Current (max.): 40.0A per Contact
- Contact Resistance (max.): 1 milliohms
- Dielectric Withstanding Voltage: 3000V AC

Physical
- Housing: PEI
- Contact: Copper (Cu) alloy
- Plating:
  - Contact Area — Gold (Au)
- PCB Thickness: 2.50mm
- Operating Temperature: -40 to +150°C

Applications

Aerospace and Defense
- Unmanned vehicles

Industrial Automation
- Industrial motors

Medical
- Diagnostic equipment

Telecommunications
- Receivers
- Satellite dish

Specifications

REFERENCE INFORMATION
- Packaging: See Packaging Spec
- UL File No.: E29179
- Terminal Used: Crimp
- Designed In: Millimeters
- RoHS: Compliant by Exemption
- Halogen Free: No
- Glow Wire Compliant: No

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Ordering Information

Multicat Connector System

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Circuit Size</th>
<th>Features</th>
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<tr>
<td>201840</td>
<td>Plug Housing</td>
<td>3 and 4</td>
<td>2 polarization options and colors</td>
</tr>
<tr>
<td>201841</td>
<td>Receptacle Housing</td>
<td>3 and 4</td>
<td>2 polarization options and colors</td>
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<tr>
<td>201842</td>
<td>Vertical Housing</td>
<td>3</td>
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<tr>
<td>201843</td>
<td>Right-Angle Housing</td>
<td>3</td>
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<td>200915</td>
<td>Circular Receptacle Housing</td>
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<tr>
<td>200914</td>
<td>Circular Plug</td>
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<tr>
<td>201844</td>
<td>Hermaphroditic Backshell</td>
<td>3 and 4</td>
<td>Two pieces, one part number</td>
</tr>
</tbody>
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