MultiCat Mid-Power Connector System with Precision-Machined Contacts

molex

Compact MultiCat Mid-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

Mid-power connector system: Lightweight and compact wire-to-wire, wire-to-board (vertical only). Accommodates between 20 and 28 AWG wire. 8- and 20-circuit inline available
Offers design flexibility for applications requiring mid-range power. Helps mitigate space and weight constraints

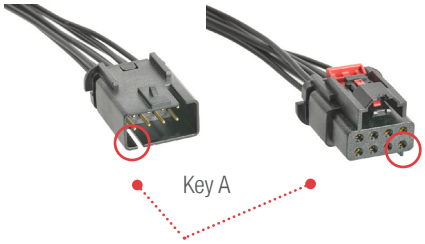
Connector position assurance (CPA) with visual indicator

- Visual assurance that connector is properly engaged
- Latch provides audible feedback
- Completely mated systems allow the CPA to actuate
- Cannot actuate CPA if system is not completely mated
- Prevents accidental latch disengagement

MultiCat Mid-Power Connector System

Manual mating / unmating
Facilitates quick assembly. No tooling or hardware required. Prevents mis-mating

2-piece hermaphroditic backshell
Secures cable. Provides strain relief. Easy access to actuate CPA and locking mechanism without removing backshells for quick mating and unmating



2 keying options; 2 housing color options. Polarization incorporated into latch
Eliminates assembly errors. Removes need for separate polarizing tabs

Mid-power current: 6.5A per contact (target)
Delivers design flexibility for high- and mid-current applications

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

Mid-Power Contacts

Low contact resistance (high-power version: ≤ 1 milliohms; mid-power version: 10 milliohms)
Offers large mating surface to support maximum current-carrying capacity. Transfers more power than stamped contact in a smaller interface

Mating force per contact (max.): 3.4N; Unmating force per contact (min.): ≥ 0.2N
Enables easy connection/ disconnection. Mitigates operator fatigue

Solid mass contact
Provides reliability and long life cycle. Resistant to damage in blind-mate applications

Applications

Commercial Aviation
- Unmanned vehicles
- Drones
- Commercial aircraft cabins

Industrial Automation
- Industrial motors

Commercial Vehicle

Telecommunications
- Receivers
- Satellite Dish

Industrial Automation

Drones

Satellite Dishes

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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

ELECTRICAL
Voltage (max.):
500V AC/DC
Current (max.): 6.5A per Contact
Contact Resistance (max.): < 5 milliohms
Dielectric Withstanding Voltage: 2000V AC

MECHANICAL
Contact Insertion Force into Housing (max.): 30N
Contact Retention to Housing (min.): 50N
Latch Strength (min.): 150N
Mating Force (max.): 3.4N per Circuit
Unmating Force (min.): .2N per Circuit
Durability (max.): 500 cycles

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

Ordering Information

Multicat Connector System

Series No.	Component	Current Rating	Circuit Size	2 polarization options and colors
205925	Inline Plug Housing	6.5A	8 and 20	2 polarization options and colors
205926	Inline Receptacle Housing			
205927	Inline Vertical Header			
205929	Hermaphroditic Backshell			N/A
202935	Male Terminal			
202936	Female Terminal			

Cable Assemblies

Custom Product	Description
Contact Molex	MultiCat Cable Assemblies

www.molex.com/link/multicat.html

Order No. 987652-0101 USA/0k/GF/2019.03