



2.54 mm(0.100") / 3.50mm
(0.138") Pitch PCB Header

Molex's CMC product family now includes the Hybrid PCB connector header for the automotive market

The CMC Hybrid PCB Header has been developed to meet the Euro III emission control requirements. Maximizing the efficiency of fuel management system took priority during the design stage.

The CMC Hybrid PCB Connector has a mounting flange which allows it to be firmly secured onto the application. The optional snap-in peg provides retention of the connector to the PCB during soldering. Terminal used is right-angle-twisted during stamping. This process enables strong terminal rigidity. Circuit size options between 1 to 48 for single port and 1-96 for double port provide design flexibility for application manufacturers.

A major application of this connector would be the engine controls.

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CMC Hybrid PCB Header



| Features | Benefits |
|--|--|
| • Polarized geometry | • To prevent mismatching the header and receptacle |
| • Wire-to-board right angle header with mounting flanges | • Easy mounting of header assembly to the chassis. |
| • Extended power pin | • Grounding due to First Mate /Last break |
| • Optional Snap-In peg | • Retention of header to PCB |
| • Options for different circuit sizes for single and double port | • Circuit configurations flexibility |
| • Wave and Manual solder compatible | • Solder process flexibility |
| • Tapered lead-in on PC tails | • Ease of insertion into the PCB board |
| • Shrouded geometry | • Identifying of sealed and unsealed applications |

SPECIFICATIONS

Reference Information

Packaging: Tray

UL File No.:

CSA File No.:

Black :

Left - 0989931311 Receptacle

Right - 0989933311 Receptacle

Brown :

Left - 0989931319 Receptacle

Right - 0989933319 Receptacle

Designed In: Millimeters

Electrical

Voltage: 250 V

Current: 5A / 15 A

Contact Resistance : 20 milliohms max

Dielectric Withstanding Voltage: 500V DC

Insulation Resistance: 100 Megohms min

Mechanical

Contact Insertion Force: 35.00N(7.86lb) min

Contact Retention to Housing: 35.00 N(7.86lb) min

Mating Force: 80.00N(17.98 lb)

Unmating Force: 80.00N(17.98 lb)

Physical

Housing: PBT Polyester, Black,
UL 94-HB Glass-filled

Contact: Brass (Cu Zn) Alloy

Plating:

Contact Area — 4.0µm (160µ") Tin (Sn)

Solder Tail Area — 4.0µm(160µ")Tin(Sn)

Under plating — 1.3µm (50µ")Nickel(Ni)

PCB Thickness: Ref order table

Operating Temperature: -40°C to 100°C





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Automotive

ECU Applications

- EMS(Engine Management System) for 4 Wheeler
- EGR(Emission Gas Release) system
- Body control module
- Solenoid valve
- EMS(Engine Management System) for two wheeler

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CMC Hybrid PCB Header



CMC Connectors in Engine Application

Ordering Information

| Description | Order No. | Pin Projection out from PCB Solder Surface | PCB Thickness | PCB Locking | Pins Loaded | Circuit Size |
|---|------------|--|---------------|-------------|-------------|--------------|
| CMC Header , 2 port | 36638-0001 | 1.3mm/0.9mm | 1.6mm / 2mm | No | 72 | 96 |
| CMC Header, 48 way X 1, T3 interface, Black | 36638-0002 | 1.3mm | 1.6mm | Yes | 48 | 48 |
| | 36638-0004 | 1.3mm/0.9mm | 1.6mm / 2mm | No | | |
| CMC Header, 48 way X 1, T3 interface, Brown | 36638-0003 | 1.3mm | 1.6mm | Yes | | |
| | 36638-0005 | 1.3mm/0.9mm | 1.6mm / 2mm | No | | |
| CMC Header, 48 way X 1, Black | 36638-0006 | 1.3mm | 1.6mm | Yes | 36 | |
| | 36638-0008 | 1.3mm/0.9mm | 1.6mm / 2mm | No | | |
| CMC Header, 48 way X 1, Brown | 36638-0007 | 1.3mm | 1.6mm | Yes | | |
| | 36638-0009 | 1.3mm/0.9mm | 1.6mm / 2mm | No | | |
| CMC Header, 2 port | 36638-0010 | 1.3mm | 1.6mm | Yes | 72 | 96 |



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