



**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.

**36638**

**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

**36638**

**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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