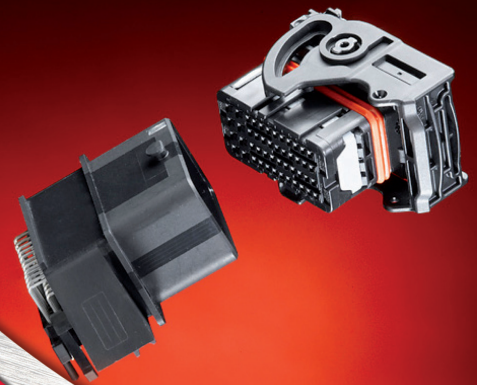


CMC Connector System

A sealed, high density and modular connection system for transportation industry



molex[®]

CMC HYBRID CONNECTORS STANDARD AND POWER VERSIONS

The CMC connector family from Molex is a sealed, high-density connection system developed for the transportation industry. It is a cost-effective, modular, hybrid system that fits with various headers.

Standard version CMC hybrid connectors hold two different terminal sizes, 0.635mm (.025") and 1.50mm (.059"). Power version CMC hybrid connectors hold three different terminal sizes, 0.635mm (.025"), 1.50mm (.059") and 2.80mm (.110"). Both connector versions run at operating temperatures between -40 and +125°C.

Features and Benefits

- High performing sealed connection system using matte seal technology for CP 0.635mm (.025") and 1.50mm (.059") terminals and using single wire seal (SWS) technology for CP 2.80mm (.110") terminals
- High density system due to compact connector design and fine pitch size of 2.54mm (.100")
- Hybrid connection system using 3 different terminal sizes CP 0.635mm, CP 1.50mm and CP 2.80mm terminals
- Modular connector system with a choice of different circuit sizes, such as: 22, 24, 28, 32, 36, 48 and 53
- System offers several colour codings and mechanical polarization
- Can perform in sealed applications where IPx9K rating and 500mbar watertightness are required
- Requires reduced space on customer printed circuit boards (PCB) or engine compartments
- Supports low, medium and high current applications from 2.5A up to 21A to perform in harsh environments and high-conductivity applications
- Cost effective system; uses same connector type for different harness size needs
- Reduces cycle time during harness assembly due to easy visual installation and avoids mis-mating of the headers and connectors

Markets and Applications

CMC can be used in the following markets: cars, trucks, busses, agricultural equipment, motorcycle or marine.

This wire-to-board application can run on Powertrain applications such as Engine Control Units, Gear Boxes, Suspension Controllers but also on Body Electronics like Junction Box, Lightning Control Systems or Electrical Doors.

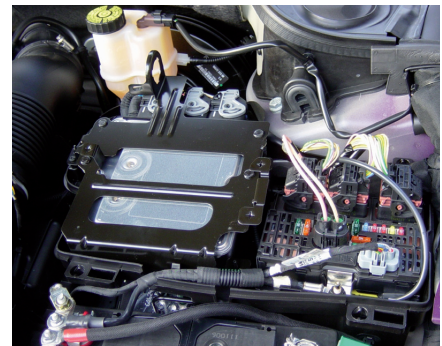
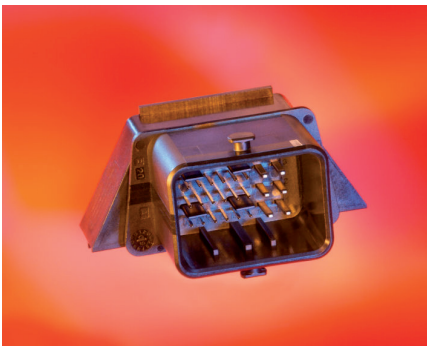
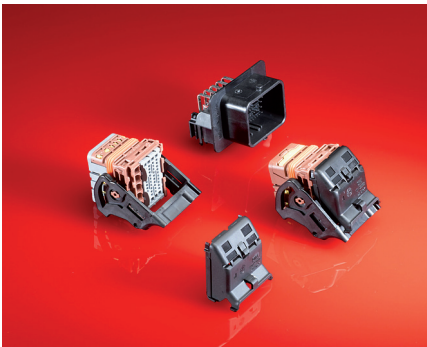








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CMC Hybrid Connector Family – Part Number overview list

Circuits	Part No.	Description	Color (Keying)	Wire Output	Matte Seal	Mates with	Terminal Loading					
22	64326-1001	Power CMC Receptacle	Black	Right	Yes	Contact Molex	20 x CP 0.60mm terminal 2 x CP 2.80mm terminal					
	64326-1005		Brown									
	64326-1009		Blue									
	64326-1002		Black	Left								
	64326-1006		Brown									
	64326-1010		Blue									
24	64319-2211	Standard CMC Receptacle	Black	Left			18 x CP 0.60mm terminal 6 x CP 1.50mm terminal					
	64319-2218		Gray									
	64319-4211		Black	Right								
	64319-4218		Gray									
	64319-1201	Wire Cap for 24-circuit Standard CMC Receptacle	N/A	N/A			N/A					
28	64318-1011	Power CMC Receptacle	Black	Left			Yes	Contact Molex	18 x CP 0.60mm terminal 5 x CP 1.50mm terminal 5 x CP 2.80mm terminal			
	64318-1018		Gray									
	64318-1019		Brown									
	64318-3011		Black	Right								
	64318-3018		Gray									
	64318-3019		Brown									
	64320-1301	Wire Cap for 28-circuit Power CMC Receptacle	N/A	N/A	N/A							
32	64319-1211	Standard CMC Receptacle	Black	Left	Yes	Contact Molex			24 x CP 0.60mm terminal 8 x CP 1.50mm terminal			
	64319-1216		Blue									
	64319-1218		Gray									
	64319-1219		Brown									
	64319-3211		Black	Right							80-circuit Header 50225-0801	
	64319-3216		Blue				32-circuit Header 64334-0100					
	64319-3218		Gray				112-circuit Header 64333-0100 Packet C					
	64319-3219		Brown									
	64319-1201		Wire Cap for 32-circuit Standard CMC Receptacle				N/A	N/A			N/A	
	64319-1211		112-circuit Header 64333-0100 Packet A									
36	64320-2311	Standard CMC Receptacle	Black	Left	Yes	Contact Molex	30 x CP 0.60mm terminal 6 x CP 1.50mm terminal					
	64320-2319		Brown									
	64320-4311		Black	Right								
	64320-4319		Brown									
	64320-1301	Wire Cap for 36-circuit Standard CMC Receptacle	N/A	N/A			N/A					
48	64320-1311	Standard CMC Receptacle	Black	Left	Yes	Contact Molex	40 x CP 0.60mm terminal 8 x CP 1.50mm terminal					
	64320-1315		Green									
	64320-1318		Gray									
	64320-1319		Brown									
	64320-3311		Black						Right	48 and 96-circuit Header 36638-0002 / 36638-0004		
	64320-3315		Green							48-circuit Header 500762-0481		
	64320-3318		Gray	154-circuit Compliant Pin Header 34763-000x Packet X								
	64320-3319		Brown	48-circuit and 96-circuit Header 36638-0003 / 36638-0005								
	64320-1301		CMC Wire Cap for 48-circuit Standard CMC Receptacle	N/A					N/A	N/A		
	64320-3311		48-circuit header 50225-0801									
64320-3315	48 and 96-circuit header 36638-0001 to 36638-0012											
64320-3318	48-circuit CMC header 500762-0481											
64320-3319	48 and 96-circuit Header 36638-0001 to 36638-0012											
64320-1301	112-circuit Header 64333-0100 Packet B											

Circuits	Part No.	Description	Color (Keying)	Wire Output	Matte Seal	Mates with	Terminal loading	
53	64321-1011	Power CMC Receptacle	Black	Left	Yes	98997-1002	40 x CP 0.60mm terminal 8 x CP 1.50mm terminal 5 x CP 2.80mm terminal	
	64321-1018		Gray			98997-1002		
	64321-1019		Brown			Contact Molex		
	64321-2011		Black	98997-1002				
	64321-2018		Gray	154-circuit Compliant Pin Header				
	64321-2019		Brown	34763-000x Packet Z				
	64321-1101	CMC Wire Cap for 53-circuit Power CMC Receptacle	N/A	N/A		Contact Molex		

Single Wire Seals

Part No.	Description	Color	Mates with	
64325-1162	CMC Single Wire Seal for CP 2.80, for cable 1.29 to 2.06mm	Red	CMC CP 2.80mm terminal	
64325-1175	CMC Single Wire Seal for CP 2.80, for cable 2.03 to 2.80mm	Green		
64325-1188	CMC Single Wire Seal for CP 2.80, for cable 2.80 to 3.50mm	Gray		
64325-1196	CMC Single Wire Seal for CP 2.80, for cable 3.50 to 4.21 mm	Blue		









Blind Plugs

Part No.	Description	Mates with	
64325-1010	CMC Blind Plug for CP terminal cavity 0.60mm	32-circuit CMC Receptacle 48-circuit CMC Receptacle 28-circuit CMC Receptacle 53-circuit CMC Receptacle	
64325-1023	CMC Blind Plug for CP terminal cavity 1.50mm		
64325-1091	CMC Blind Plug for CP terminal cavity 2.80mm		

Terminals

Description	Plating	Part No.	Wire Size	Mates with			
CP terminal 0.60mm	Tin	64322-1019	0.35mm ²	32-circuit CMC Receptacle 48-circuit CMC Receptacle 28-circuit CMC Receptacle 53-circuit CMC Receptacle			
CP terminal 0.60mm		64322-1029	0.75mm ²				
CP terminal 0.60mm		64322-1039	0.50mm ²				
CP terminal 0.60mm	1.27µ Gold	64322-1219	0.75mm ²				
CP terminal 0.60mm		64322-1229	0.35mm ²				
CP terminal 0.60mm		64322-1239	0.50mm ²				
CP terminal 0.60mm HP	Tin	64322-1339	0.75mm ²	32-circuit CMC Receptacle 48-circuit CMC Receptacle 28-circuit CMC Receptacle 53-circuit CMC Receptacle			
CP terminal 0.60mm HP		64322-1349	0.35mm ²				
CP terminal 0.60mm HP		64322-1359	0.50mm ²				
CP terminal 1.50mm	1.27µ Gold	64323-1029	0.50 to 1.00mm ²			32-circuit CMC Receptacle 48-circuit CMC Receptacle 28-circuit CMC Receptacle 53-circuit CMC Receptacle	
CP terminal 1.50mm		64323-1039	> 1.00 to 2.00mm ²				
CP terminal 1.50mm		64323-1219	> 1.00 to 2.00mm ²				
CP terminal 1.50mm	64323-1319	0.50 to 1.00mm ²					
CP terminal 2.80mm	Tin	64324-1019	> 3.00 to 5.00mm ²	28-circuit CMC Receptacle 53-circuit CMC Receptacle			
CP terminal 2.80mm		64324-1029	> 2.00 to 3.00mm ²				
CP terminal 2.80mm		64324-1039	> 1.00 to 2.00mm ²				
CP terminal 2.80mm		64324-1049	0.50 to 1.00mm ²				
CP terminal 2.80mm	1.27µ Gold	64324-1119	> 3.00 to 5.00mm ²				
CP terminal 2.80mm		64324-1129	> 2.00 to 3.00mm ²				
CP terminal 2.80mm		64324-1139	> 1.00 to 2.00mm ²				
CP terminal 2.80mm		64324-1149	0.50 to 1.00mm ²				

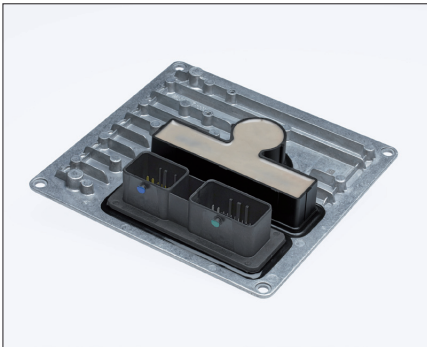
CMC Hybrid Header Family - Part Number overview list

Circuits	Part No.	Mates with CMC Connector	Description	No. of pockets	Pins count 0.63mm	Pins count 1.50mm	Pins count 2.80mm	Terminal Type		
32	64334-0100	64319-3211	32-circuit CMC header	1	24	8		Solder pin		
	64334-0300	64319-3219								
36	36638-0006	64320-2311 or 64320-4311	36-circuit CMC header		30	6	0			
	36638-0008									
	36638-0007	64320-2319 or 64320-4319	36-circuit CMC header - Signal pins in AU 1.27µ							
	36638-0009									
	36638-0013	64320-2311 or 64320-4311	36-circuit CMC header based on 500762-0481							
47732-0361										
48	500762-0481	64320-1311 or 64320-3311	48-circuit CMC header		40	8				
	36638-0002	64320-1311 or 64320-3311								
	36638-0004									
	36638-0003 36638-0005	64320-1319 or 64320-3319								
53	98997-1002	64321-1011 or 64321-2011	53-circuit Header		40	8	5			
72	36638-0001 36638-0010	64320-2319 and 64320-4311	72-circuit Header (36 + 36)		2	60	12		0	
80	502225-0801	64320-1319 and 64319-3211	80-circuit Header (48 + 32)	64		16	0			
96	36638-0011 36638-0012	64320-1319 and 64320-3311	96-circuit Header (48 + 48)	80		16	0			
112	64333-0100	64319-3211 and 64320-3319 and 64319-1218	112-circuit Header (32 + 48 + 32)	3		88	24	0		
154	34763-0001	64321-2011 and 64321-2019 and 64320-1318	154-circuit Header (48 + 53 + 53)		120	24	10	Compliant pin EON style		

CMC Hybrid Connector Application Examples



CMC 48-circuit header, 36638 series
Mating to CMC 48-circuit connector, 64320 series,
used for LPG application (LPG = Liquid Power Gas)



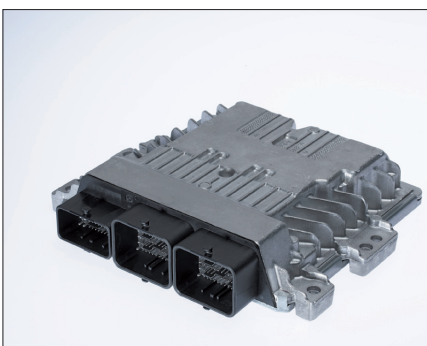
CMC 80-circuit header, custom design
Mating to CMC 32- and 48-circuit connector, 64319 and 64320 series,
used for Gear Box application



CMC 28-circuit headers, custom design
Mating to CMC 28-circuit connectors, 64318 series,
used for Fuse Box application



CMC 48-circuit header, 500762 series
Mating to CMC 48-circuit connector, 64320 series,
used for Engine Control Unit



CMC 154-circuit header in compliant pin, 34763 series
Mating to CMC 48-, 53- circuit connector, 64320 and 64321 series,
used for Engine Control Unit

2.54mm (.100") 4.20mm (.170") 8.40mm (.331") Pitch Wire-to-Board CMC Power Hybrid Connector

Wire Cap, Plug and Single Wire Seals

64326 22-Circuit Receptacle Left and right wire output



Features and Benefits

- Small connector size, same size as 32-circuit 64319 series
- 2 x CP 2.80mm (.110") power terminals and 20 x CP 0.635mm (.025") signal pins
- Matte-seal technology used for CP 0.635mm (.025") signal contacts
- Single wire-seal technology used for CP 2.80mm (.110")
- Blind plugs for unused circuits
- Perimeter seal
- Color coding
- Audible 'click' during locking
- Requires small space in the application
- Supports high-current applications but as well applications requiring high number of signal pins
- High-performance sealing due to seal cavity design using several sealing lips
- Secure and reliable sealing for power terminals
- Secure sealing system when flexibility is required for unused cavities with a standard backplate
- Secures sealing between the connector and mating header
- Easy visual installation
- Ensures connector and header are mated securely

Reference Information

Product Specification: PS-64326-001
Application Specification: AS-64326-001
Sales Drawing: SD-64326-001

Mates with:
22 circuit CMC header
please contact Molex for details

Use with:
Terminal: 64322 CP 0.635mm (.025")
64324 CP 2.80mm (.110")

Plug: 64325-1010 Plug 0.635mm (.025") cavity
64325-1091 Plug 2.80mm (.110") cavity

Wire Cap: 64319-1201 CMC Wire Cap

Designed in: Millimeters

Electrical

Voltage (max.): 250V AC

Current (max.):
CP 0.635mm (.025") terminals - max 4.5A
(0.75mm² wire)*
CP 2.80mm (.110") terminals - max 26.0A
(5.00mm² wire)*

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance (low level):
0.635mm (.025") terminal : 8 milliohms max
2.80mm (.110") terminal : 3 milliohms max

Dielectric Withstanding Voltage:
No breakdown

Insulation Resistance:
100 Megohms min

Mechanical

Contact Insertion Force:
0.635mm (.025") terminal: 12.00N max
2.80mm (.110") terminal: 25.00N max
Contact Retention to Housing:
0.635mm (.025") terminal: 60.00N min
2.80mm (.110") terminal: 100.00N min

Wire Pull-Out Force: 100.00N min

Durability: 20 mating cycles

Physical

Housing: PBT Polyester, Class UL-V0, Glass-filled
Contact: See details in SD-64322-001
SD-64324-001

Operating Temperature: -40 to +125°C

Connectors

Order No.	Color Key Coding	Wire Output
64326-1001	Black	Right
64326-1005	Brown	
64326-1009	Blue	
64326-1002	Black	Left
64326-1006	Brown	
64326-1010	Blue	

Blind Plug

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange
64325-1091	2.80mm (.110")	Black

Wire Cap

Order No.	Circuits	Color
64319-1201	32	Black

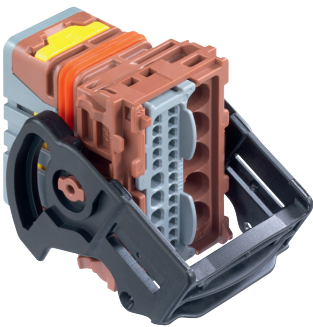
Single Wire Seals

Order No.	Description	Color
64325-1162	For cable 1.29mm to 2.06mm	Red
64325-1175	For cable 2.03mm to 2.80mm	Green
64325-1188	For cable 2.80mm to 3.50mm	Gray
64325-1196	For cable 3.50mm to 4.21mm	Blue

2.54mm (.100") 3.50mm (.138") 6.75mm (.266") Pitch Wire-to-Board CMC Power Hybrid Connector

Wire Cap, Plug and Single Wire Seals

64318 28-Circuit Receptacle Left and right wire output



Features and Benefits

- 3 different color codings
- Mechanical polarization
- Audible "click" during locking
- 5 x CP 2.80mm (.110") power terminals
- Matte seal technology used for CP 0.635mm (.025") and 1.50mm (.059") terminals
- Single wire-seal technology used for CP 2.80mm (.110") terminals
- Blind plugs for unused circuits
- Easy visual installation
- Avoids mis-mating
- Ensures connector and header are mated securely
- Support high-current applications
- High-performing sealing due to seal cavity design using several sealing lips
- Secure and reliable sealing for CP 2.80mm (.110") terminals
- Secure sealing system when flexibility is required for unused cavities with a standard backplate

Reference Information

Product Specification: PS-64318-001
Application Specification: AS-64318-001
Sales Drawing: SD-64318-001

Mates with:
28 circuit CMC header
please contact Molex for details

Use with:
Terminal: 64322 CP 0.635mm (.025")
64323 CP 1.50mm (.059")
64324 CP 2.80mm (.110")

Plug: 64325-1010 Plug 0.635mm (.025") cavity
64325-1023 Plug 1.50mm (.059") cavity
64325-1091 Plug 2.80mm (.110") cavity

Single Wire Seals: 64325-1162
64325-1175
64325-1188
64325-1196
Wire Cap: 64320-1301 CMC Wire Cap for 48 circuit and 28 circuit CMC Receptacle

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *
2.5A for CP 0.635mm (.025") terminal (0.75mm² wire)
12.0A for CP 1.50mm (.059") terminal (1.5mm² wire)
21.0A for CP 2.80mm (.110") terminals (2.8mm²)

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance:
CP 0.635mm (.025"): 8 milliohms max.
CP 1.50mm (.059"): 4 milliohms max.
CP 2.80mm (.110"): 3 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force:
CP 0.635mm (.025"): 12.00N max.
CP 1.50mm (.059"): 20.00N max.
CP 2.80mm (.110"): 25.00N max.

Contact Retention to Housing:
CP 0.635mm (.025"): 60.00N min.
CP 1.50mm (.059"): 100.00N min.
CP 2.80mm (.110"): 100.00N min

Wire Pull-Out Force: min. 100.00 N

Insertion Force to PCB: N/A

Mating Force: 70.00N max
Unmating Force: 70.00N max
Normal Force: N/A

Durability: 20 mating cycles

Physical

Housing: PBT Glass-filled
Operating Temperature: -40 to +125°C

Connectors

Order No.	Circuits	Color Key Coding	Wire Output
64318-3011	28	Black	Right
64318-3018		Grey	
64318-3019		Brown	
64318-1011		Black	Left
64318-1018		Grey	
64318-1019		Brown	

Blind Plug

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange
64325-1091	2.80mm (.110")	Black

Wire Cap

Order No.	Circuits	Color
64319-1201	32	Black

Single Wire Seals

Order No.	Description	Color
64325-1162	For cable 1.29mm to 2.06mm	Red
64325-1175	For cable 2.03mm to 2.80mm	Green
64325-1188	For cable 2.80mm to 3.50mm	Gray
64325-1196	For cable 3.50mm to 4.21mm	Blue

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board CMC Hybrid Connector

Wire Cap and Plug

64319 32-Circuit Receptacle Left and right wire output



Features and Benefits

- 4 different color codings
- Mechanical polarization
- Audible 'click' during locking
- 24 x CP 0.635mm (.025") terminals
8 x CP 1.50mm (.059") terminals
- Matte seal technology used for CP 0.635mm (.025") and 1.50mm (.059") terminals
- Blind plugs for unused circuits
- Easy visual installation
- Avoids mis-mating
- Ensures connector and header are mated securely
- Support low and medium current applications
- High-performing sealing due to seal cavity design using several sealing lips
- Secure sealing system when flexibility is required for unused cavities with a standard backplate

Reference Information

Product Specification: PS-64319-001
Application Specification: AS-64319-001
Sales Drawing: SD-64319-001

Mates with:

32-ckt CMC Header – 1 pocket

64334-0100

64334-0300

80-ckt CMC Header – 2 pocket

502225-0801

112-ckt CMC Header – 3 pocket

64333-0100

Use with:

Terminal: 64322 CP 0.635mm (.025")

64323 CP 1.50mm (.059")

Plug: 64325-1010 Plug 0.635mm (.025") cavity

64325-1023 Plug 1.50mm (.059") cavity

Wire Cap: 64319-1201 CMC Wire Cap for 32 circuit
CMC Receptacle

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *

6.0A for CP 0.635mm (.025") terminal (0.75mm² wire)

12.0A for CP 1.50mm (.059") terminal (2.0mm² wire)

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

CP 0.635mm (.025"): 8 milliohms max.

CP 1.50mm (.059"): 4 milliohms max.

Dielectric Withstanding Voltage:

1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:

CP 0.635mm (.025"): 12.00N max.

CP 1.50mm (.059"): 25.00N max.

Contact Retention to Housing:

CP 0.635mm (.025"): 60.00N min.

CP 1.50mm (.059"): 100.00N min.

Wire Pull-Out Force: min. 100.00 N

Insertion Force to PCB: N/A

Mating Force: 70.00N max

Unmating Force: 70.00N max

Normal Force: N/A

Durability: 20 mating cycles

Physical

Housing: PBT Glass-filled

Operating Temperature: -40 to +125°C

Connectors

Order No.	Circuits	Color Key Coding	Wire Output
64319-3211	32	Black	Right
64319-3216		Blue	
64319-3218		Grey	
64319-3219		Brown	
64319-1211	32	Black	Left
64319-1216		Blue	
64319-1218		Grey	
64319-1219		Brown	
64319-2211	24	Black – Row 1 closed	Left
64319-2218		Grey – Row 4 closed	Left
64319-4211		Black – Row 1 closed	Right
64319-4218		Grey – Row 4 closed	Right

Blind Plug

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange

Wire Cap

Order No.	Circuits	Color
64319-1201	32	Black

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board CMC Hybrid Connector

Wire Cap and Plug

64320

48-Circuit Receptacle Left and right wire output



Features and Benefits

- 4 different color codings
- Mechanical polarization
- Audible 'click' during locking
- 24 x CP 0.635mm (.025") terminals
8 x CP 1.50mm (.059") terminals
- Matte seal technology used for CP 0.635mm (.025") and 1.50mm (.059") terminals
- Blind plugs for unused circuits
- Easy visual installation
- Avoids mis-mating
- Ensures connector and header are mated securely
- Support low and medium current applications
- High-performing sealing due to seal cavity design using several sealing lips
- Secure sealing system when flexibility is required for unused cavities with a standard backplate

Reference Information

Product Specification: PS-64319-001
Application Specification: AS-64319-001
Sales Drawing: SD-64320-001

Mates with:

48-ckt CMC Header - 1-pocket
500762-0481
36638-0002 / -0004
36638-0003 / -0005
80-ckt CMC Header - 2-pocket
502225-0801
112-ckt CMC Header - 3-pocket
64333-0100
154-ckt CMC Header - 3-pocket
34763-000x

Use with:

Terminal: 64322 CP 0.635mm (.025")
64323 CP 1.50mm (.059")

Plug:

64325-1010 Plug 0.635mm (.025") cavity
64325-1023 Plug 1.50mm (.059") cavity

Wire Cap:

64320-1301 CMC Wire Cap for 48 circuit and 28 circuit CMC Receptacle

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *

6.0A for CP 0.635mm (.025") terminal (0.75mm² wire)
12.0A for CP 1.50mm (.059") terminal (2.0mm² wire)

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

CP 0.635mm (.025"): 8 milliohms max.
CP 1.50mm (.059"): 4 milliohms max.

Dielectric Withstanding Voltage:

1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:

CP 0.635mm (.025"): 12.00N max.
CP 1.50mm (.059"): 25.00N max.

Contact Retention to Housing:

CP 0.635mm (.025"): 60.00N min.
CP 1.50mm (.059"): 100.00N min.

Wire Pull-Out Force: min. 100.00 N

Insertion Force to PCB: N/A

Mating Force: 70.00N max

Unmating Force: 70.00N max

Normal Force: N/A

Durability: 20 mating cycles

Physical

Housing: PBT Glass-filled

Operating Temperature: -40 to +125°C

Connectors

Order No.	Circuits	Color Key Coding	Wire Output
64320-3311	48	Black	Right
64320-3315		Green	
64320-3318		Grey	
64320-3319		Brown	
64320-1311	48	Black	Left
64320-1315		Green	
64320-1318		Grey	
64320-1319		Brown	
64320-2311	36	Black – Row 1 closed	Left
64320-2319		Brown – Row 1 closed	Left
64320-4311		Black – Row 1 closed	Right
64320-4319		Brown – Row 1 closed	Right

Blind Plug

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange

Wire Cap

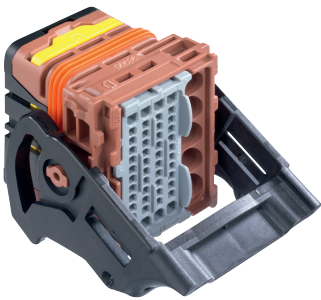
Order No.	Circuits	Color
64320-1301	48	black

2.54mm (.100") 3.50mm (.138") 7.00mm (.276") Pitch Wire-to-Board CMC Power Hybrid Connector

Wire Cap, Plug and Single Wire Seals

64321

53-Circuit Receptacle Left and right wire output



Features and Benefits

- 3 different color codings
- Mechanical polarization
- Audible 'click' during locking
- 40 x CP 0.635mm (.025") terminals
8 x CP 1.50mm (.059") terminals
5 x CP 2.80mm (.110") terminals
- Matte seal technology used for CP 0.635mm (.025") and 1.50mm (.059") terminals
- Single wire-seal technology used for CP 2.80mm (.110") terminals
- Blind plugs for unused circuits
- Easy visual installation
- Avoids mis-mating
- Ensures connector and header are mated securely
- Support low, medium and high current applications
- High-performing sealing due to seal cavity design using several sealing lips
- Secure and reliable sealing for CP 2.80mm (.110") terminals
- Secure sealing system when flexibility is required for unused cavities with a standard backplate

Reference Information

Product Specification: PS-64321-001
Application Specification: AS-64321-001
Sales Drawing: SD-64321-001

Mates with:
53-ckt CMC Header – 1 pocket
98997-1002
154-ckt CMC Header – 3 pocket
34763-0001

Use with:
Terminal: 64322 CP 0.635mm (.025")
64323 CP 1.50mm (.059")
64324 CP 2.80mm (.110")
Plug: 64325-1010 Plug 0.635mm (.025") cavity
64325-1023 Plug 1.50mm (.059") cavity
64325-1091 Plug 2.80mm (.110") cavity
Single Wire Seals: 64325-1162
64325-1175
64325-1188
64325-1196
Wire Cap: 64321-1101 CMC Wire Cap for
53 circuit CMC Receptacle

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *
2.5A for CP 0.635mm (.025") terminal (0.75mm² wire)
12.0A for CP 1.50mm (.059") terminal (2.0mm² wire)
21.0A for CP 2.80mm (.110") terminals (5.0mm²)

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance:

CP 0.635mm (.025"): 8 milliohms max.
CP 1.50mm (.059"): 4 milliohms max.
CP 2.80mm (.110"): 3 milliohms max.

Dielectric Withstanding Voltage:

1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:
CP 0.635mm (.025"): 12.00N max.
CP 1.50mm (.059"): 20.00N max.
CP 2.80mm (.110"): 25.00N max.

Contact Retention to Housing:

CP 0.635mm (.025"): 60.00N min.
CP 1.50mm (.059"): 100.00N min.
CP 2.80mm (.110"): 100.00N min

Wire Pull-Out Force: min. 100.00 N

Insertion Force to PCB: N/A
Mating Force: 80.00N max
Unmating Force: 80.00N max
Normal Force: N/A

Durability: 20 mating cycles

Physical

Housing: PBT Glass-filled
Operating Temperature: -40 to +125°C

Connectors

Order No.	Circuits	Color Key Coding	Wire Output
64321-2011	53	Black	Right
64321-2018		Grey	
64321-2019		Brown	
64321-1011		Black	Left
64321-1018		Grey	
64321-1019		Brown	

Blind Plug

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange
64325-1091	2.80mm (.110")	Black

Wire Cap

Order No.	Circuits	Color
64321-1101	53	black

Single Wire Seals

Order No.	Description	Color
64325-1162	For cable 1.29mm to 2.06mm	Red
64325-1175	For cable 2.03mm to 2.80mm	Green
64325-1188	For cable 2.80mm to 3.50mm	Gray
64325-1196	For cable 3.50mm to 4.21mm	Blue

0.635mm (.025") Width Terminal Female Crimp CMC CP Terminal 64322



Features and Benefits

- 2 piece terminal design
- Tang locking system
- Robust design with fully protected beam
- Various ISO wire size compatibility
- Available in tin and gold plating

Reference Information

Product Specification:
please refer to product specification of the relevant CMC connector

Crimping Specification:
CS-64322-001

Sales Drawing:
SD-64322-001 and SD-64322-002 for the HP version (High-Performance)

Mates with:
CMC connector series 64318, 64319, 64320, 64321

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *
6.0A for CP 0.635mm (.025") terminal (0.75mm² wire)

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:
CP 0.635mm (.025"): 8 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force between male and female terminal:

CP 0.635mm (.025"): 4.00N max.

Contact Insertion Force into Housing (sealed connector):
CP 0.635mm (.025"): 12.00N min.

Wire Pull-Out Force:
min. 100.00N for wire size of 0.50mm²

Mating / Unmating Force:
Please refer to product specification of the relevant CMC connector the terminal is used with

Durability: 20 mating cycles

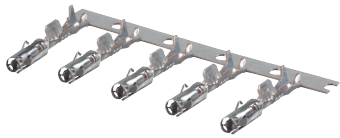
Physical

Contact: Phosphor Bronze
Plating: available in tin and gold
Insulation diameter: see table

Terminals

Order No.	Width	Plating	Wire Size in mm ²	Wire Insulation Diameter in mm
64322-1019	0.635mm (.025")	Tin (Sn)	0.35	1.25 - 1.40
64322-1029			0.75	1.60 - 1.90
64322-1039			0.50	1.40 - 1.70
64322-1219		1.27µm Gold (Au)	0.75	1.60 - 1.90
64322-1229			0.35	1.25 - 1.40
64322-1239			0.50	1.40 - 1.70
64322-1339	0.75		1.60 - 1.90	
64322-1349	0.635mm (.025") HP		0.35	1.25 - 1.40
64322-1359			0.50	1.40 - 1.70

1.50mm (.059") Width Terminal Female Crimp CMC CP Terminal 64323



Features and Benefits

- 2 piece terminal design
- Tang locking system
- Robust design with fully protected beam
- Various ISO wire size compatibility
- Available in tin and gold plating

Reference Information

Product Specification:
please refer to product specification of the relevant CMC connector

Crimping Specification:
CS-64323-001

Sales Drawing:
SD-64323-001

Mates with:
CMC connector series 64318, 64319,
64320, 64321

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *
12.0A for CP 1.50mm (.059") terminal (2.00mm² wire)

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:
CP 1.50mm (.059"): 4 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force between male and female terminal:
CP 1.50mm (.059"): 5.50N max.

Contact Insertion Force into Housing (sealed connector):
CP 1.50mm (.059"): 25.00N min.

Wire Pull-Out Force:
min. 100.00N for wire size of 0.50mm²

Mating / Unmating Force:
Please refer to Product Specification of the relevant CMC connector the terminal is used with

Durability: 20 mating cycles

Physical

Contact: Phosphor Bronze
Plating: available in tin and gold
Insulation diameter: see table

Terminals

Order No.	Width	Plating	Wire Size in mm ²	Wire Insulation Diameter in mm
64323-1029	1.50mm (.059")	Tin (Sn)	0.50 to 1.00	1.40 – 2.15
64323-1039			> 1.00 to 2.00	2.10 – 2.80
64323-1219		1.27µm Gold (Au)	0.50 to 1.00	1.40 – 2.15
64323-1319				

2.80mm (.110") Width Terminal Female Crimp CMC CP Terminal Single Wire Seal

64324

64325



Features and Benefits

- 2 piece terminal design
- Tang locking system
- Robust design with fully protected beam
- Various ISO wire size compatibility
- Available in tin and gold plating

Reference Information

Product Specification:
please refer to product specification of the relevant CMC connector

Crimping Specification: CS-64324-001

Sales Drawing: SD-64324-001

Mates with:
CMC connector series 64318, 64321

Used with:
Single Wire Seals
64325-1162
64325-1175
64325-1188
64325-1196

Designed in: Millimeters

Electrical

Voltage: 250V AC

Current: *
21.0A for CP 2.80mm (.110") terminals (5.00mm²)

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance:
CP 2.80mm (.110"): 3 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force between male and female terminal:
CP 2.80mm (.110"): 7.00N max.

Contact Insertion Force into Housing (sealed connector):
CP 2.80mm (.110"): 25.00N min

Wire Pull-Out Force:
min. 100.00N for wire size of 0.50mm²

Mating / Unmating Force:
Please refer to product specification of the relevant CMC connector the terminal is used with

Durability: 20 mating cycles

Physical

Contact: Phosphor Bronze
Plating: available in tin and gold
Insulation diameter: see table

CP Terminals

Order No.	Width	Plating	Wire Size in mm ²	Wire Insulation Diameter in mm
64324-1019	2.80mm (.110")	Tin (Sn)	> 3.00 to 5.00	3.40 – 4.00
64324-1029			> 2.00 to 3.00	2.65 – 3.45
64324-1039			> 1.00 to 2.00	2.10 – 2.80
64324-1049			0.50 to 1.00	1.40 – 2.15
64324-1119		1.27µm Gold (Au)	> 3.00 to 5.00	3.40 – 4.00
64324-1129			> 2.00 to 3.00	2.65 – 3.45
64324-1139			> 1.00 to 2.00	2.10 – 2.80
64324-1149			0.50 to 1.00	1.40 – 2.15

Single Wire Seals

Order No.	Description	Color
64325-1162	For cable 1.29mm to 2.06mm	Red
64325-1175	For cable 2.03mm to 2.80mm	Green
64325-1188	For cable 2.80mm to 3.50mm	Gray
64325-1196	For cable 3.50mm to 4.21mm	Blue

**Blind Plug
CMC Hybrid Connector
CMC Blind Plug
For
CP terminal cavity
0.635mm (.025")
CP terminal cavity
1.50mm (.059")
CP terminal cavity
2.80mm (.110")
64325**



Features and Benefits

- CMC Blind plugs secure a high performing CMC sealing system, when flexibility is required for unused cavities

Reference Information

Product Specification:

please refer to product specification of the relevant CMC connector

Application Specification:

please refer to application specification of the relevant CMC connector

Sales Drawing: SD-64325-001 for CP 0.635mm (.025") cavity
SD-64325-002 for CP 1.50mm (.059") cavity
SD-64325-004 for CP 2.80mm (.110") cavity

Mates with: CMC Plug 0.635mm (.025") and CMC Plug 1.50mm (.059"); with CMC connector series 64318, 64319, 64320, 64321

CMC Plug 2.80mm (.110"); with CMC connector series 64318, 64321

Designed in: Millimeters

Electrical

Voltage: N/A
Current: N/A
Contact Resistance: N/A
Dielectric Withstanding Voltage: N/A
Insulation Resistance: N/A

Mechanical

Contact Insertion Force: N/A
Contact Retention to Housing: N/A
Wire Pull-Out Force: N/A
Insertion Force to PCB: N/A
Mating Force: N/A
Unmating Force: N/A
Normal Force: N/A
Durability: N/A

Physical

CMC CP Plug 0.635mm (.025"): Polyamid - White color
CMC CP Plug 1.50mm (.059"): Polyamid - Orange color
CMC CP Plug 2.80mm (.110"): Rubber - Black color

Operating Temperature: -40 to +125°C

CP Terminals

Order No.	Terminal Width	Color
64325-1010	0.635mm (.025")	White
64325-1023	1.50mm (.059")	Orange
64325-1091	2.80mm (.110")	Black

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board 1 pocket CMC Header

64334
32-circuit



Features and Benefits

- 32-circuit, single-pocket, right-angle header
- Terminals mate with CP 0.635mm (.025") and CP 1.50mm (.059") solder-mount terminals
- Designed to CMC standard interface
- Housing made out of high flammability V0 plastic material
- Plastic material is suitable for epoxy adhesion
- Plastic material is hydrolytically stable
- Headers are off shelf available
- Mates with CMC receptacle 32-circuit in grey or black coding
- For low- and medium-current applications
- Mates with any CMC connector range
- Achieves OEM specification requirements
- Allows glueing process at Engine Control Unit manufacturer
- Suitable for sealed applications
- No custom tooling cost

Reference Information

Product Specification:
please refer to product specification of the relevant mating CMC connector

Packaging: Trays in carton box

Mates With: 64319-3211
32ckt Connector black

64319-3219
32ckt Connector brown

Use With: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm
64319-1201 32ckt Wire Cap

64322 series CP Terminals 0.60mm (.025")
64323 series CP Terminals 1.50mm (.059")

Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *

CP 0.635mm (.025") terminals – max 6.0A (0.75mm² wire)*

CP 1.50mm (.059") terminals – max 12.0A (2.00mm² wire)*

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

0.635mm (.025") terminals: 8 milliohms max.

1.50mm (.059") terminals: 4 milliohms max.

Dielectric Withstanding Voltage:

1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:

0.635mm (.025") terminal: 12.00N max

1.50mm (.059") terminal: 25.00N max

Contact Retention to Housing:

0.635mm (.025") terminal: 60.00N min.

1.50mm (.059") terminal: 100.00N min

Wire Pull-Out Force: min 100.00N

Mating Force: 70.00N max.

Unmating Force: 70.00N max.

Durability: 20 mating cycles

Physical

Housing: PBT, Glass-filled

Lead-Free: Yes

Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Terminal Type
64334-0100	32	64319-3211	24	8	Solder pin
64334-0300		64319-3219			

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board 1 pocket CMC Header

500762-0481

48-circuit



Features and Benefits

- 48-circuit, 1-pocket, right-angle header
- Compact design of CMC header
- Terminals mate with CP 0.635mm (.025") and CP 1.50mm (.059") solder-mount terminals
- Housing made out of high flammability V0 plastic material
- Plastic material is suitable for epoxy adhesion
- Plastic material is hydrolytically stable
- Headers are off shelf available
- Mates with CMC receptacle 48-circuit connector
- Needs less space
- For low- and medium-current applications
- Achieves OEM specification requirements
- Allows glueing process at Engine Control Unit manufacturer
- Suitable for sealed applications
- No custom tooling costs

Reference Information

Product Specification:

Please refer to product specification of the relevant mating CMC connector.

Packaging: Trays in carton box

Mates With: 64320-1311 or
64320-3311

Use With:

On Connector side: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm

64320-1301 48ckt Wire Cap

64322 series
CP Terminals 0.60mm (.025")
64323 series
CP Terminals 1.50mm (.059")

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *

CP 0.635mm (.025") terminals – max 6.0A
(0.75mm² wire)*

CP 1.50mm (.059") terminals – max 12.0A
(2.00mm² wire)*

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

0.635mm (.025") terminals: 8 milliohms max.

1.50mm (.059") terminals: 4 milliohms max.

Dielectric Withstanding Voltage: 1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:

0.635mm (.025") terminal: 12.00N max

1.50mm (.059") terminal: 25.00N max

Contact Retention to Housing:

0.635mm (.025") terminal: 60.00N min.

1.50mm (.059") terminal: 100.00N min

Wire Pull-Out Force:

min 100.00N

Mating Force: 70.00N max.

Unmating Force: 70.00N max.

Durability: 20 mating cycles

Physical

Housing: PBT, Glass-filled

Lead-Free: Yes

Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Terminal Type
500762-0481	48	64320-1311 or 64320-3311	40	8	Solder pin

2.54mm (.100")
3.50mm (.138")
7.00mm (.276") Pitch
Wire-to-Board
1 pocket
CMC Header

98997-1002
53-circuit



Features and Benefits

- 53-circuit, 1-pocket, right-angle header
- Offers a power connection using 2.80mm tabs
- Terminals mate with CP 0.635mm (.025"), CP 1.50mm (.059") and CP 2.80mm (.110") solder-mount terminals
- Plastic material is suitable for epoxy adhesion
- Headers are off shelf available
- Mates with CMC receptacle 53-circuit connector
- Support high current applications
- For low-, medium- and high-current applications
- Allows glueing process at Engine Control Unit manufacturer
- No custom tooling costs

Reference Information

Product Specification:
Please refer to product specification of the relevant mating CMC connector.

Packaging: Trays in carton box

Mates With: 64321-1011 or 64321-2011

Use With:
On Connector side: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm
64325-1091 Blind Plug 2.80mm

64321-1101 53ckt Wire Cap

64322 series
CP Terminals 0.60mm (.025")
64323 series
CP Terminals 1.50mm (.059")
64324 series
CP Terminals 2.80mm (.110")

Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *
2.5A for CP 0.635mm (.025") terminal
(0.75mm² wire)
12.0A for CP 1.50mm (.059") terminal
(2.0mm² wire)
21.0A for CP 2.80mm (.110") terminals
(5.00mm²)

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance:

CP 0.635mm (.025"): 8 milliohms max.
CP 1.50mm (.059"): 4 milliohms max.
CP 2.80mm (.110"): 3 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force:
CP 0.635mm (.025"): 12.00N max.
CP 1.50mm (.059"): 20.00N max.
CP 2.80mm (.110"): 25.00N max.

Contact Retention to Housing:
CP 0.635mm (.025"): 60.00N min.
CP 1.50mm (.059"): 100.00N min.
CP 2.80mm (.110"): 100.00N min

Wire Pull-Out Force: min. 100.00N

Insertion Force to PCB: N/A
Mating Force: 80.00N max
Unmating Force: 80.00N max
Normal Force: N/A

Durability: 20 mating cycles

Physical

Housing: PBT Glass-filled
Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Pin Count 2.80mm	Terminal Type
98997-1002	53	64321-1011 or 64321-2011	40	8	5	Solder pin

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board 2 pocket CMC Header

502225-0801

80-circuit



Features and Benefits

- 80-circuit, 2-pocket, right-angle header
- Compact design of CMC header
- Terminals mate with CP 0.635mm (.025") and CP 1.50mm (.059") solder-mount terminals
- Housing made out of high flammability V0 plastic material
- Plastic material is suitable for epoxy adhesion
- Plastic material is hydrolytically stable
- Headers are off shelf available
- Mates with CMC receptacles 32-circuit and 48-circuit connector
- Needs less space
- For low- and medium-current applications
- Achieves OEM specification requirements
- Allows glueing process at Engine-Control Unit manufacturer
- Suitable for sealed applications
- No custom tooling costs needed

Reference Information

Product Specification:

Please refer to product specification of the relevant mating CMC connector.

Packaging: Trays in carton box

Mates With: 64320-1319 and
64319-3211

Use With:

On Connector side: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm

64319-1201 32ckt Wire Cap
64320-1301 48ckt Wire Cap

64322 series
CP Terminals 0.60mm (.025")
64323 series
CP Terminals 1.50mm (.059")

Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *

CP 0.635mm (.025") terminals – max 6.0A
(0.75mm² wire)*
CP 1.50mm (.059") terminals – max 12.0A
(2.00mm² wire)*

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

0.635mm (.025") terminals: 8 milliohms max.
1.50mm (.059") terminals: 4 milliohms max.

Dielectric Withstanding Voltage:

1000V AC for 1 minute

Insulation Resistance:

100 Megohms min.

Mechanical

Contact Insertion Force:

0.635mm (.025") terminal : 12.00N max
1.50mm (.059") terminal : 25.00N max

Contact Retention to Housing:

0.635mm (.025") terminal : 60.00N min.
1.50mm (.059") terminal : 100.00N min

Wire Pull-Out Force:

min 100.00N

Mating Force: 70.00N max.

Unmating Force: 70.00N max.

Durability: 20 mating cycles

Physical

Housing: PBT, Glass-filled

Lead-Free: Yes

Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Terminal Type
502225-0801	80 (32 + 48)	64320-1319 and 64319-3211	64	16	Solder pin

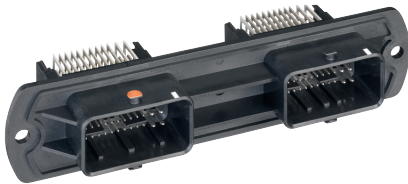
2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board 1 pocket CMC Header

36-circuit and 48-circuit



2 pocket CMC Header

72-circuit and 96-circuit 36638



Features and Benefits

- 1 or 2-pocket CMC header in right-angled version
- Different circuit sizes options for 1 and 2 pocket headers
- Offers optional a snap-in peg
- Terminals mate with CP 0.635mm (.025") and CP 1.50mm (.059") solder-mount terminals
- Mounting to customer box by screwing
- Headers are off shelf available
- Mates with CMC receptacle 48-circuit connector
- Provides configuration flexibility
- Supports retention of the header to the PCB
- For low- and medium-current applications
- Safe and robust mounting
- No custom tooling costs needed

Reference Information

Product Specification:
Please refer to product specification of the relevant mating CMC connector.

Packaging: Trays in carton box

Mates With: 64320 series
See details below

Use With:
On Connector side: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm

64319-1201 32ckt Wire Cap
64320-1301 48ckt Wire Cap

64322 series
CP Terminals 0.60mm (.025")
64323 series
CP Terminals 1.50mm (.059")

Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *
CP 0.635mm (.025") terminals – max 6.0A
(0.75mm² wire)*
CP 1.50mm (.059") terminals – max 12.0A
(2.00mm² wire)*

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:

0.635mm (.025") terminals: 8 milliohms max.
1.50mm (.059") terminals: 4 milliohms max.

Dielectric Withstanding Voltage: 1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force:
0.635mm (.025") terminal: 12.00N max
1.50mm (.059") terminal: 25.00N max

Contact Retention to Housing:
0.635mm (.025") terminal: 60.00N min.
1.50mm (.059") terminal: 100.00N min

Wire Pull-Out Force:
min 100.00N

Mating Force: 70.00N max.
Unmating Force: 70.00N max.

Durability: 20 mating cycles

Physical

Housing: PBT, Glass-filled
Lead-Free: Yes
Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Terminal Type	Plating
36638-0001	72 (36 + 36)	64320-2319 and 64320-4311	60	12	Solder	tin
36638-0002	48	64320-1311 or 64320-3311	40	8		
36638-0003		64320-1319 or 64320-3319				
36638-0004		64320-1311 or 64320-3311				
36638-0005		64320-1319 or 64320-3319				
36638-0006	36	64320-2311 or 64320-4311	30	6		
36638-0007		64320-2319 or 64320-4319				
36638-0008		64320-2311 or 64320-4311				
36638-0009		64320-2319 or 64320-4319				
36638-0010	72 (36 + 36)	64320-2319 and 64320-4311	60	12		
36638-0011	96 (48 + 48)	64320-1319 and 64320-3311	88	24		
36638-0012		64320-1319 and 64320-3311				
36638-0013	36	64320-2311 or 64320-4311	30	6		

2.54mm (.100") 3.70mm (.146") Pitch Wire-to-Board 3 pocket CMC Header

64333

112-circuit



Features and Benefits

- 112-circuit, three-pocket, right-angle header
- Terminals mate with CP 0.635mm (.025") and CP 1.50mm (.059") solder-mount terminals
- Housing made out of high flammability V0 plastic material
- Plastic material is suitable for epoxy adhesion
- Plastic material is hydrolytically stable
- Headers are off shelf available
- Mates with CMC receptacle 32-circuit grey+48-circuit brown+32-circuit black coding
- For low- and medium-current applications
- Achieves OEM specification requirements
- Allows glueing process at Engine Control Unit manufacturer
- Suitable for sealed applications
- No custom tooling costs

Reference Information

Product Specification:
please refer to product specification of the relevant mating CMC connector

Reference Information

Packaging: Trays in carton box

Mates With: 64319-3211 and
64320-3319 and
64319-1218

Use With:
On Connector side: 64325-1010 Blind Plug 0.635mm
64325-1023 Blind Plug 1.50mm

64319-1201 32ckt Wire Cap
64320-1301 48ckt Wire Cap

64322 series
CP Terminals 0.60mm (.025")
64323 series
CP Terminals 1.50mm (.059")

Designed In: mm
RoHS: Yes
Halogen Free: Yes

Electrical

Voltage: 250V AC

Current: *
CP 0.635mm (.025") terminals – max 6.0A
(0.75mm² wire)*
CP 1.50mm (.059") terminals – max 12.0A
(2.00mm² wire)*

* current tested on a 5 terminals loaded connector, current for temperature increase of 40°C

Contact Resistance:
0.635mm (.025") terminals: 8 milliohms max.
1.50mm (.059") terminals: 4 milliohms max.

Dielectric Withstanding Voltage:
1000V AC for 1 minute

Insulation Resistance:
100 Megohms min.

Mechanical

Contact Insertion Force:
0.635mm (.025") terminal: 12.00N max
1.50mm (.059") terminal: 25.00N max

Contact Retention to Housing:
0.635mm (.025") terminal: 60.00N min.
1.50mm (.059") terminal: 100.00N min

Wire Pull-Out Force:
min 100.00N

Mating Force: 70.00N max.
Unmating Force: 70.00N max.
Durability: 20 mating cycles

Physical

Housing: PBT, Glass-filled
Lead-Free: Yes
Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Terminal Type
64333-0100	112 (32 + 48 + 32)	64319-3211 and 64320-3319 and 64319-1218	88	24	Solder pin

2.54mm (.100")
3.50mm (.138")
7.00mm (.276") Pitch
Wire-to-Board
3 pocket
CMC Header

Compliant Pin
Press-fit terminals

34763-0001
154-circuit



Features and Benefits

- 154-circuit, 3-pocket, right-angle header with compliant pin terminals for solder-free processing
- 154-circuit header features 120 x 0.635mm (.025") signal pins, 24 x 1.50mm (.110") terminals and 10x28mm (.110") power pins
- Sophisticated new robust design of integral guiding plate on 154-circuit header
- 154-circuit connection system is designed to perform up to 50 mating cycles
- 154-circuit header is designed with option for potting before adhesion to the casting
- Improves productivity; allows high-speed, low-cost assembly of the headers to the PCB for customers with established press-fit type mounting processes; conforms to global lead-free initiatives
- Supports high-current applications; designed for use in large ECU's (Engine Control Units)
- Protects the 5 terminal rows and ensures positioning whilst withstanding high-vibration levels up to 10G; ideal for heavy-duty agricultural equipment applications
- Allows mating and unmating of several ECU's on different applications; e.g., when changing the ECU's in a tractor to another application such as harvester
- Connection system can be fully sealed in unmated condition

Reference Information

Product Specification:
 please refer to product specification of the relevant mating CMC connector.

Packaging: Trays in carton box

Mates With: 64321-2011
 64321-2019
 64320-1318

Use With:
On Connector side: 64325-1010 Blind Plug 0.635mm
 64325-1023 Blind Plug 1.50mm
 64325-1091 Blind Plug 2.80mm
 64321-1101 53ckt Wire Cap

64322 series
 CP Terminals 0.60mm (.025")
 64323 series
 CP Terminals 1.50mm (.059")
 64324 series
 CP Terminals 2.80mm (.110")

Designed In: Millimeters
 RoHS: Yes
 Halogen Free: Yes

Electrical
 Voltage: 250V AC

Current: *
 2.5A for CP 0.635mm (.025") terminal
 (0.75mm² wire)
 12.0A for CP 1.50mm (.059") terminal (2.0mm² wire)
 21.0A for CP 2.80mm (.110") terminals (5.0mm²)

* current tested on a fully loaded connector, current for temperature increase of 40°C

Contact Resistance:
 CP 0.635mm (.025"): 8 milliohms max.
 CP 1.50mm (.059"): 4 milliohms max.
 CP 2.80mm (.110"): 3 milliohms max.

Dielectric Withstanding Voltage:
 1000V AC for 1 minute

Insulation Resistance:
 100 Megohms min.

Mechanical

Contact Insertion Force:
 CP 0.635mm (.025"): 12.00N max.
 CP 1.50mm (.059"): 20.00N max.
 CP 2.80mm (.110"): 25.00N max.

Contact Retention to Housing:
 CP 0.635mm (.025"): 60.00N min.
 CP 1.50mm (.059"): 100.00N min.
 CP 2.80mm (.110"): 100.00N min

Wire Pull-Out Force:
 min. 100.00 N

Insertion Force to PCB: N/A
 Mating Force: 80.00N max
 Unmating Force: 80.00N max
 Normal Force: N/A

Durability: 20 mating cycles

Physical
 Housing: PBT Glass-filled
 Operating Temperature: -40 to +125°C

Header

Order No.	Circuits	Mates with	Pin Count 0.63mm	Pin Count 1.50mm	Pin Count 2.80mm	Terminal Type
34763-0001	154 (48 + 53 + 53)	64321-2011 64321-2019 64320-1318	120	24	10	Compliant Pin, Press-fit style (Eye-of-Needle)

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