Molex is a major force in the global automotive interconnection business. For good reason: we offer vehicle manufacturers and their suppliers comprehensive capabilities, from extensive research and development to design engineering, rapid prototyping and high-volume production. And, as the world's number two connector manufacturer, we apply breakthroughs in non-automotive technology to the car.

With 115 facilities in 21 countries on six continents, Molex designs, manufactures and services customers everywhere they manufacture and assemble.

Our automotive design teams in Technical Centers around the world are linked electronically to share expertise and expedite development. All of our manufacturing sites are ISO 9000 and QS 9000 certified.

The average new vehicle today contains twice as many Molex connectors as only three years ago. As electronic content increases, Molex is responding with innovative products that simplify the electrical distribution systems in vehicles, significantly reduce weight and packaging space and boost performance and reliability. Many products incorporate our proprietary technologies in shielding, filtering and assembly.

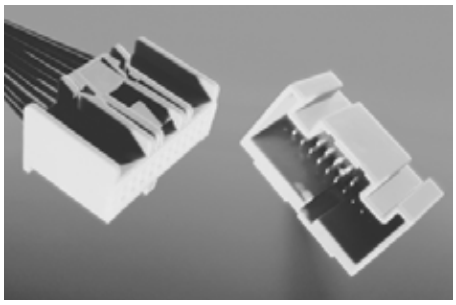
Our 1999 acquisition of Cardell Corporation further broadened our product range, especially in terminal systems, and gave us a strong Detroit manufacturing base, with particular capability in insert molding. In addition, through Origin Modular Interconnects, Inc.—our joint venture with Sheldahl, Inc.—we are applying new flex circuity technology to replace wire harnesses with lighter, space-saving flex-based harnessing systems.

As a technology and new product resource for the world's major vehicle manufactures and Tier 1 suppliers, Molex provides interconnects and systems for virtually every part of a vehicle, bumper to bumper.

Safety

Air bags, ABS brakes, vehicle stability systems and other passenger safety equipment have become essential to the appeal and function of today's vehicles. Molex connectors provide the reliability and performance demanded by these often life-saving devices.

For that reason, we continuously improve our safety equipment connectors through extensive R&D, stringent quality controls in every phase of development and manufacture, and extensive reliability testing at our internal laboratories. Our engineers employ advanced quality planning disciplines throughout the development process and carefully design and optimize manufacturing systems for high quality and productivity.



Driver Information Systems/Audio/Air Control

Drivers want the comforts of home and the communications technology of an office with them on the road. For that reason, navigation devices, vehicle information centers, cellular phones, audio systems and individual passenger HVAC are reshaping the passenger compartment.

Molex's success in connector miniaturization gives automotive packaging designers space-saving ideas. For example, designers increasingly are choosing Molex connectors for telematic applications such as Driver Information Systems, Intelligent Vehicle Highway Systems, Global Positioning Systems, emergency locator systems and silent anti-theft systems. We also offer connectors for multi-disc CD changers and in-steering-wheel audio and climate controls. In addition, our strong position in cellular phone connectors extends to in-vehicle applications such as phone cradles and headsets that provide hands-free communication while driving.

Molex's groundbreaking work with consumer electronics manufactures over the past decade has led to dramatic reductions in the size and weight of products such as camcorders and cellular phones, while increasing the number of circuits. We have applied these advances to decreasing the space required by connectors in driver information, audio and air-control systems.

Molex is an active participant in a variety of industry standards committees whose focus is telematics, the term for automotive multimedia. Committees such as the SAE/Intelligent Data Bus MOST (media oriented systems transport) and IEEE 1394 are working to define the standards that will enable integrated voice, video and data communication within the vehicle. Drivers and passengers will be able to power devices such as hands-free cellular phones, PDAs, laptops, video games and movies through the vehicle's electronic systems. Whether the devices are embedded into the vehicle or hot plug and play, Molex is at the forefront of developing the proper optical and copper interconnects.

Control Modules

For the next generation of control module connectors, Molex is now addressing design challenges such as reducing pin size to yield higher pin densities and combating the high vibration and temperature conditions of on-engine applications.

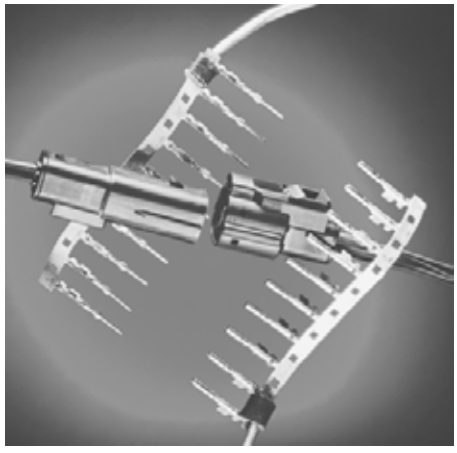
Molex also produces a variety of control module connectors for ABS, electronic hydraulic power steering units, and memory feeds for seats, mirrors and other passenger conveniences.

Body-Chassis

Molex manufactures connectors for body and chassis harnesses that perform under the harshest conditions. We employ the latest technology to advance our molding, stamping, plating and assembly processes to produce rugged, durable connectors that withstand the rigors of the assembly environment and the road.

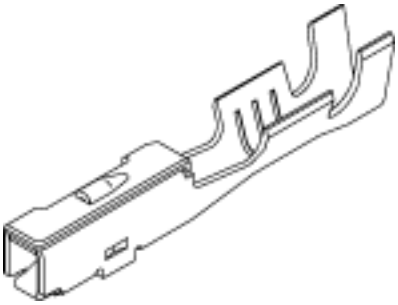
With the trend toward more electronics-incorporated vehicles, Molex has played a key role in developing connectors for electronic control modules. These include manufacturing the housing and I/O connectors that control alarm systems, door zone functions, trunk openings and mirror movement. In many cases, Molex can combine separate parts into a single insert molding or assembly.

Other Molex products for body and chassis applications include electrical junction boxes that integrate connectors, fuses, busses and relays into a complete system, as well as plastic fuel pump flange assemblies, which are lighter in weight and a cost-effective alternative to steel.



1.00mm (.040") Tab Terminal

50654
Female



Order No.	Wire Range (mm²)	Lead-free
50654-1001	AVS (AVSS) 0.3-0.5	Yes

Features and Benefits
- Locking tab secures terminal to housing

Reference Information
Product Specification: PS-68145-002
Packaging: Reel
Mates With: 50660 Terminal
Use With: 35563, 35564, 35896, 35898, 49014, 64002 and 68508 housings
Designed In: Millimeters

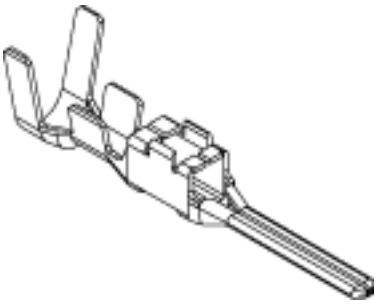
Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Physical
Contact: Copper Alloy
Plating: Contact Area—Pre-Tin
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=50654

1.00mm (.040") Tab Terminal

50660
Male



Order No.	Wire Range (mm²)	Lead-free
50660-9001	AVS (AVSS) 0.3-0.5	Yes

Features and Benefits
- Locking tab secures terminal to housing

Reference Information
Product Specification: CS-50660-001
Packaging: Reel
Mates With: 50654 terminal
Use With: 35897, 35899, 49016, 49102 and 68507 housings
Designed In: Millimeters

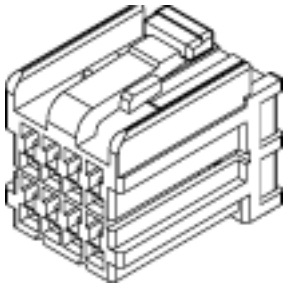
Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 15 kgf max.
Unmating Force: 15 kgf max.
Durability: 50 cycles

Physical
Contact: Brass
Plating: Contact Area—Pre-Tin
Operating Temperature: -40 to +85˚C

1.00mm (.040") Tab Wire-to-Wire/ Wire-to-Board 040 111 Housing

68508/64002/35563/35564
Female, 2 Rows



Circuits	Order No.	Color
8	68508-0811	Black
12	64002-1210	White
16	35563-1610	
20	35564-2010	

Features and Benefits
- Meets industry-standard requirements for 040 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability and mechanical and electrical reliability
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-68145-001
Packaging: Bag
Mates With: 53874, 68145 and 68151
Use With: 50654
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

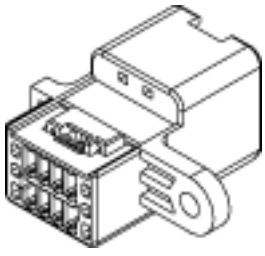
Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 15 kgf max.
Unmating Force: 15 kgf max.
Durability: 50 cycles

Physical
Housing: Polyester, UL 94-HB
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=68508

1.00mm (.040") Tab Wire-to-Wire 040 III Housing

68507
Male, 8 Circuits, 2 Rows



Circuits	Order No.	Type
8	68507-0811	Screw
	68507-0821	Clip

Features and Benefits
- Meets industry-standard requirements for 040 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability, and mechanical and electrical reliability
- Side flange provides panel mounting retention
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-35896-001 and PS-68507-003
Packaging: Bag
Mates With: 68508
Use With: 50654 and 50660
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

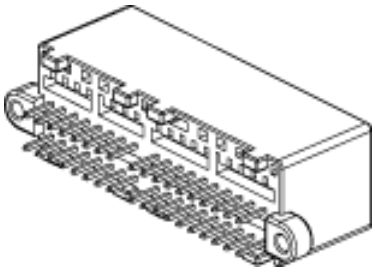
Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 10 kgf max.
Unmating Force: 10 kgf max.
Durability: 50 cycles

Physical
Housing: Polyester, UL 94-HB
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=68507

1.00mm (.040") Tab Wire-to-Board 040 III Header

68145/68151-XX1X
Vertical



Circuits	Order No.	Lead-free
8	68145-0811	Yes
12	68145-1211	
16	68145-1615	
20	68151-2015	
28	68145-2815	
36	68145-3615	

Features and Benefits
- Meets industry-standard requirements for 040 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability and mechanical and electrical reliability
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-68145-002 and PS-68145-005
Packaging: Tray
Mates With: 35563, 35564, 64002 and 68508
Use With: 50654
Designed In: Millimeters

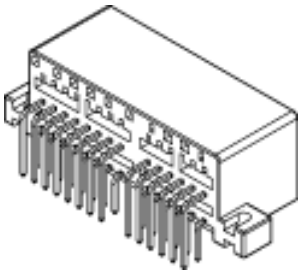
Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 15 kgf max.
Unmating Force: 15 kgf max.
Durability: 50 cycles

Physical
Housing: Polyester, UL 94-HB
Contact: Brass
Plating: Contact Area—Tin
Solder Tail Area—Tin
Underplating: Copper
PCB Thickness: 1.6mm (.062")
Operating Temperature: -40 to +85˚C

1.00mm (.040") Tab Wire-to-Board 040 III Header

68145/68151-XX2X
Right Angle



Circuits	Order No.	Lead-free
8	68145-0821	Yes
12	68145-1221	
16	68145-1625	
20	68151-2025	
28	68145-2825	
36	53874-3615	

Features and Benefits
- Meets industry-standard requirements for 040 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability and mechanical and electrical reliability
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-68145-002 and PS-68145-005
Packaging: Tray
Mates With: 35563, 35564, 64002 and 68508
Use With: 50654
Designed In: Millimeters

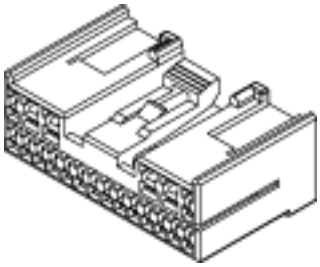
Electrical
Voltage: 14V
Current: 5.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 15 kgf max.
Unmating Force: 15 kgf max.
Durability: 50 cycles

Physical
Housing: Polyester, UL 94-HB
Contact: Brass
Plating: Contact Area—Tin
Solder Tail Area—Tin
Underplating: Copper
PCB Thickness: 1.6mm (.062")
Operating Temperature: -40 to +85˚C

1.00/2.30mm (.040/.090") Tab Wire-to-Wire 0409 Hybrid Housing

49014/35898/35896
Female



Circuits	Order No.
10	49014-1010
14	35898-1410
20	35896-2010
22	35896-2210
24	35896-2410

Features and Benefits
- Meets industry-standard requirements for 040/090 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability, and mechanical and electrical reliability
- Side flange provides panel mounting retention
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-35896-001 and PS-68507-003
Packaging: Bag
Mates With: 35897, 35899 and 49016
Use With: 35421 and 50654
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 5.0A max. (.040")
10.0A max. (.090")
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

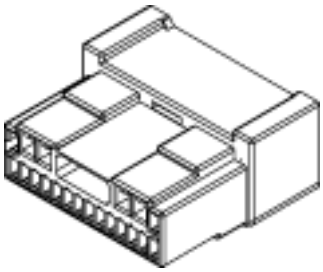
Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 18 kgf max.
Unmating Force: 10 kgf max.
Durability: 50 cycles

Physical
Housing: White Polyester, UL 94-HB
Operating Temperature: -40 to +88˚C

www.molex.com/customer.html?seriesNumber=49014

1.00/2.30mm (.040/.090") Tab Wire-to-Wire 0409 Hybrid Housing

49016/35899/35897
Male



Circuits	Order No.
10	49016-1010
14	35899-1410
20	35897-2010
22	35897-2210
24	35897-2410

Features and Benefits
- Meets industry-standard requirements for 040/090 automotive interface
- Side Terminal Position Assurance (TPA) feature virtually eliminates terminal backout
- Rugged contact design offers increased life cycle durability, and mechanical and electrical reliability
- Side flange provides panel mounting retention
- Fully shrouded to protect contacts

Reference Information
Product Specification: PS-68145-002 and PS-68145-005
Packaging: Bag
Mates With: 49014, 35898 and 35896
Use With: 50660 and 57919
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 5.0A max. (.040")
10.0A max. (.090")
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

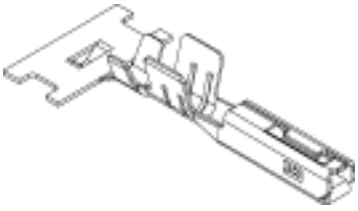
Mechanical
Contact Insertion Force: 1.5 kgf min.
Contact Retention to Housing: 8.0 kgf min.
Mating Force: 18 kgf max.
Unmating Force: 18 kgf max.
Durability: 50 cycles

Physical
Housing: Polyester, UL 94-HB
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=49016

1.50mm (.591") Pitch MX150™ Terminals

33001/33012/ 34081/34083 Female



Features and Benefits
- Meets USCAR performance testing
- Low insertion force
- Multiple plating options
- Strong crimps
- Accommodates SAE and metric wires
- Sealed and unsealed versions
- Lead free

Reference Information
Packaging: Reel
Mates With: MX150 plastic series 33471, 33472, 33476, 34062 and 34250
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 22.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

Mechanical
Contact Insertion Force: 3.0N average
Wire Pull-Out Force: 14 AWG—180N min.
22 AWG—70N
Mating Force: 3.0N average
Unmating Force: 3.0N average
Normal Force: 6.0N average

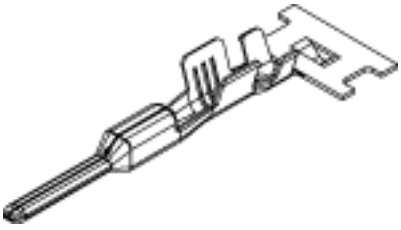
Physical
Contact: Copper Alloy
Plating: Tin or Gold
Wire Gauge: 14 to 22 AWG (max. O.D. = 2.49mm)
Operating Temperature: -40 to +125˚C

Order No.	Description	Grip Size	Plating/Payoff
33001-2003	Matte Seal Female Terminal	14/16 AWG	Gold/Right to Left
33001-2004		18/20 AWG	
33001-2005		22 AWG	
33001-3003		14/16 AWG	Gold/Left to Right
33001-3004		18/20 AWG	
33001-3005		22 AWG	
33001-2021	Unsealed Female Terminal	14/16 AWG	Gold/Right to Left
33001-2022		18/20 AWG	
33001-2023		22 AWG	
33001-3021		14/16 AWG	Gold/Left to Right
33001-3022		18/20 AWG	
33001-3023		22 AWG	
33012-2001	Matte Seal Female Terminal	14/16 AWG	Tin/Right to Left
33012-2002		18/20 AWG	
33012-2003		22 AWG	
33012-3001		14/16 AWG	Tin/Left to Right
33012-3002		18/20 AWG	
33012-3003		22 AWG	

Order No.	Description	Grip Size	Plating/Payoff
33012-2021	Unsealed Female Terminal	14/16 AWG	Tin/Right to Left
33012-2022		18/20 AWG	
33012-2023		22 AWG	
33012-3021		14/16 AWG	Tin/Left to Right
33012-3022		18/20 AWG	
33012-3023		22 AWG	
34081-2003	Cable Seal Female Terminal	16 AWG	Gold/Right to Left
34081-2004		18/20 AWG	
34081-2005		22 AWG	
34081-3003		16 AWG	Gold/Left to Right
34081-3004		18/20 AWG	
34081-3005		22 AWG	
34083-2001		16 AWG	Tin/Right to Left
34083-2002		18/20 AWG	
34083-2003		22 AWG	
34083-3001		16 AWG	Tin/Left to Right
34083-3002		18/20 AWG	
34083-3003		22 AWG	

1.50mm (.591") Pitch MX150™ Terminals

33000/33011 Male



Features and Benefits
- Meets USCAR performance testing
- Low insertion force
- Multiple plating options
- Strong crimps
- Accommodates SAE and metric wires
- Lead free

Reference Information
Packaging: Reel
Mates With: MX150 plastic series 33481, 33482 and 33486
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 22.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

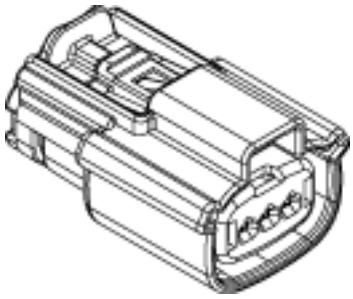
Mechanical
Contact Insertion Force: 3.0N average
Wire Pull-Out Force: 14 AWG—180N min.
22 AWG—70N
Mating Force: 3.0N average
Unmating Force: 3.0N average
Normal Force: 6.0N average

Physical
Contact: Copper Alloy
Plating: Tin or Gold
Wire Gauge: 14 to 22 AWG (max O.D. = 2.49mm)
Operating Temperature: -40 to +125˚C

Order No.	Description	Grip Size	Plating/Payoff
33000-0001	Matte Seal/Unsealed Male Terminal	14 AWG	Tin/Right to Left
33000-0002		16/18/20 AWG	
33000-0003		22 AWG	
33011-1002		14 AWG	Gold/Right to Left
33011-1004		16/18/20 AWG	
33011-1006		22 AWG	
33000-1001		14 AWG	Tin/Left to Right
33000-1002		16/18/20 AWG	
33000-1003		22 AWG	
33011-0002		14 AWG	Gold/Left to Right
33011-0004		16/18/20 AWG	
33011-0006		22 AWG	

3.50mm (.138") Pitch MX150™ Sealed Connectors

33471 Female
33481 Male
Single Row



Features and Benefits
- Meets USCAR performance requirements
- Smallest 1.50mm (.059") sealed connector in the market
- Terminal retention is 2x industry standard
- Matte seal design
- Polarization options available
- Available with or without CPA
- Clip slot standard on male side

Reference Information
Packaging: Bulk
Mates With: 33471 and 33481
Use With: MX150 terminals
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 22.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

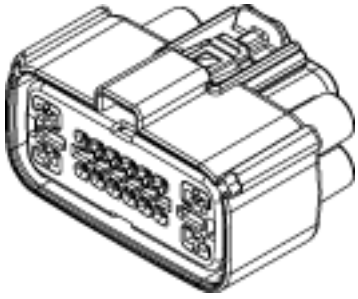
Mechanical
Contact Insertion Force: Less than 15N
Contact Retention to Housing: 110N min.
Wire Pull-Out Force: 90N min.
Mating Force: 75N max.
Unmating Force: 75N max.
Normal Force: Terminal dependent

Physical
Housing: 30% glass filled nylon, UL 94-HB
Contact: Will accommodate Tin, Silver or Gold
Insulation Diameter: 14 AWG UTX 2.49mm O.D. to 22 AWG TXL
Wire Gauge: 14 to 22 AWG and Metric
Operating Temperature: -40 to +125˚C

Circuits	Order No.	Description	Color	CPA Option
3	33471-0301	1x3 Female Polarization A	Black	No
	33471-0302	1x3 Female Polarization B	Gray	
	33471-0306	1x3 Female Polarization A	Black	Yes
	33471-0307	1x3 Female Polarization B	Gray	
	33481-0301	1x3 Male Polarization A	Black	No
	33481-0302	1x3 Male Polarization B	Gray	
4	33471-0401	1x4 Female Polarization A	Black	No
	33471-0402	1x4 Female Polarization B	Gray	
	33471-0406	1x4 Female Polarization A	Black	Yes
	33471-0407	1x4 Female Polarization B	Gray	
	33481-0401	1x4 Male Polarization A	Black	No
	33481-0402	1x4 Male Polarization B	Gray	
6	33471-0601	1x6 Female Polarization A	Black	No
	33471-0602	1x6 Female Polarization B	Gray	
	33471-0606	1x6 Female Polarization A	Black	Yes
	33471-0607	1x6 Female Polarization B	Gray	
	33481-0601	1x6 Male Polarization A	Black	No
	33481-0602	1x6 Male Polarization B	Gray	

3.50mm (.138") Pitch MX150™ Hybrid Sealed Connectors

33476 Female
33486 Male
Dual Row



Features and Benefits
- Combines 1.50 and 2.80mm (.059 and .110") terminals in same connector
- Terminal retention is 2x industry standard
- Polarization options available
- Available with or without CPA
- Clip slot standard on male side

Reference Information
Packaging: Bag
Mates with: 33471 and 33481
Use With: MX150 terminals
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 22.0A for 1.5mm terminals and 25.0A for 2.8mm terminals
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

Mechanical
Contact Insertion Force: Less than 15N
Contact Retention to Housing: 110N min.
Wire Pull-Out Force: 90N min.
Mating Force: 75N max.
Unmating Force: 75N max.
Normal Force: Terminal dependent

Physical
Housing: 30% glass filled nylon, UL 94-HB

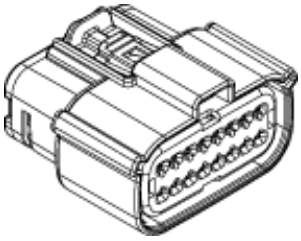
1.5mm terminals
Contact: Tin, Silver or Gold
Insulation Diameter: 14 AWG UTX 2.49mm O.D. to 22 AWG TXL
Wire Gauge: 14 to 22 AWG and Metric

2.8mm terminals
Contacts: Tin
Wire Gauge: 12 to 22 AWG
Operating Temperature: -40 to +125˚C

Order No.	Description	Color	CPA Option
33476-1601	2x8 Female Polarization A	Black	No
33476-1602	2x8 Female Polarization B	Gray	
33476-1606	2x8 Female Polarization A	Black	Yes
33476-1607	2x8 Female Polarization B	Gray	
33486-1601	2x8 Male Polarization A	Black	No
33486-1602	2x8 Male Polarization B	Gray	

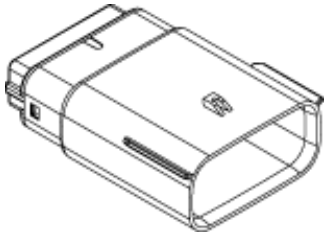
3.50mm (.138") Pitch MX150™ Sealed Connectors

33472 Female
33482 Male
Dual Row



Features and Benefits
- Meets USCAR footprint and performance requirements
- Smallest 1.50mm (.059") sealed connector in the market
- Terminal retention is 2x industry standard
- Matte seal design
- Polarization options available
- Available with or without CPA
- Clip slot standard on male side

Reference Information
Packaging: Bag
Mates With: 33471 and 33481
Use With: MX150 terminals
Designed In: Millimeters



Electrical
Voltage: 250V
Current: 22.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

Mechanical
Contact Insertion Force: Less than 15N
Contact Retention to Housing: 110N min.
Wire Pull-Out Force: 90N min.
Mating Force: 75N max.
Unmating Force: 75N max.
Normal Force: Terminal dependent

Physical
Housing: 30% glass filled nylon, UL 94-HB
Contact: Will accommodate Tin, Silver or Gold
Insulation Diameter: 14 AWG UTX 2.49mm O.D. to 22 AWG TXL
Wire Gauge: 14 to 22 AWG and Metric
Operating Temperature: -40 to +125˚C

Circuits	Order No.	Description	Color	CPA Option
4	33472-0401	2x2 Female Polarization A	Black	No
	33472-0402	2x2 Female Polarization B	Gray	
	33472-0406	2x2 Female Polarization A	Black	Yes
	33472-0407	2x2 Female Polarization B	Gray	
	33482-0401	2x2 Male Polarization A	Black	No
	33482-0402	2x2 Male Polarization B	Gray	
6	33472-0601	2x3 Female Polarization A	Black	No
	33472-0602	2x3 Female Polarization B	Gray	
	33472-0606	2x3 Female Polarization A	Black	Yes
	33472-0607	2x3 Female Polarization B	Gray	
	33482-0601	2x3 Male Polarization A	Black	No
	33482-0602	2x3 Male Polarization B	Gray	
8	33472-0801	2x4 Female Polarization A	Black	No
	33472-0802	2x4 Female Polarization B	Gray	
	33472-0806	2x4 Female Polarization A	Black	Yes
	33472-0807	2x4 Female Polarization B	Gray	
	33482-0801	2x4 Male Polarization A	Black	No
	33482-0802	2x4 Male Polarization B	Gray	

Circuits	Order No.	Description	Color	CPA Option
12	33472-1201	2x6 Female Polarization A	Black	No
	33472-1202	2x6 Female Polarization B	Gray	
	33472-1206	2x6 Female Polarization A	Black	Yes
	33472-1207	2x6 Female Polarization B	Gray	
	33482-1201	2x6 Male Polarization A	Black	No
	33482-1202	2x6 Male Polarization B	Gray	
16	33472-1601	2x8 Female Polarization A	Black	No
	33472-1602	2x8 Female Polarization B	Gray	
	33472-1606	2x8 Female Polarization A	Black	Yes
	33472-1607	2x8 Female Polarization B	Gray	
	33482-1601	2x8 Male Polarization A	Black	No
	33482-1602	2x8 Male Polarization B	Gray	
20	33472-2001	2x10 Female Polarization A	Black	No
	33472-2002	2x10 Female Polarization B	Gray	
	33472-2006	2x10 Female Polarization A	Black	Yes
	33472-2007	2x10 Female Polarization B	Gray	
	33482-2001	2x10 Male Polarization A	Black	No
	33482-2002	2x10 Male Polarization B	Gray	

www.molex.com/ind/mx150.html

3.50 by 6.00mm (.138 by .236") MX150™ Wire-to-Board PCB Header

75757
Unshrouded, Breakaway

Features and Benefits
- High-temperature thermoplastic housing is lead-free processing compatible
- Unshrouded design offers customers flexibility in application
- Designed to be compatible with Molex MX150 connectors and accommodates wire-to-board applications
- Compatible with USCAR 1.50mm (.059") specifications
- Unique breakaway design provides ability to break between rows and circuits

Reference Information
Product Specification: PS-75757-000
Packaging: Tubes
UL File No.: Pending
CSA File No.: Pending
Mates With: 33471; 33472
Designed In: Metric

Electrical
Voltage: ≤500V DC
Current: 16.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 20 Megohms min.

Mechanical
Durability: 25 cycles—Tin; 50 cycles—Gold

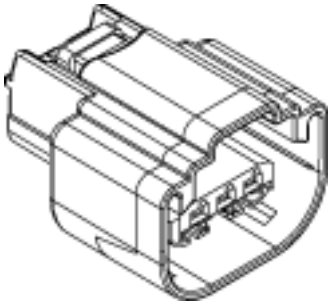
Physical
Housing: LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—Tin or Gold
Solder Tail Area—Tin
Underplating—Nickel
PCB Thickness: .062" or .093/.125"
Operating Temperature: -40 to +125˚C

Order No.			PCB Thickness	Lead-free
Tin	15µm (.590µ") Tin	30µm (1.81µ") Tin		
75757-1401	75757-1201	75757-1202	.062	Yes
75757-1101				
75757-1402	75757-1301	75757-1302	.093/.125	
75757-1102				

www.molex.com/product/mx150ubh.html

4.50mm (.177") Pitch MX150™ Cable Sealed Connector

34250
Single Row



Features and Benefits
- Compact 1.50mm (.059") terminal connector
- Meets USCAR footprints
- Uses cable sealed terminals
- Available with or without CPA
- Polarization options available
- Single and dual key options

Reference Information
Packaging: Bag
Mates With: Direct connect only
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 15.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

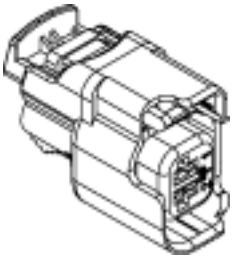
Mechanical
Contact Insertion Force: Less than 15N
Contact Retention to Housing: 100N min.
Wire Pull-Out Force: 90N min.
Mating Force: Less than 45N
Unmating Force: Less than 45N
Normal Force: Terminal dependent

Physical
Housing: PBT + 10% glass filled, UL 94-HB
Contact: Tin or Gold
Wire Gauge: 16 to 22 AWG
Operating Temperature: -40 to +125˚C

Order No.	Description	Color	CPA
34250-0001	1x3 Dual Key Polarization A	Black	Yes
34250-0002	1x3 Dual Key Polarization B	Gray	
34250-0003	1x3 Dual Key Polarization C	Brown	
34250-0004	1x3 Dual Key Polarization D	Green	
34250-0017	1x3 Dual Key Polarization A	Black	No
34250-0018	1x3 Dual Key Polarization B	Gray	
34250-0019	1x3 Dual Key Polarization C	Brown	
34250-0020	1x3 Dual Key Polarization D	Green	
34250-0033	1x3 Single Key Polarization A	Black	Yes
34250-0034	1x3 Single Key Polarization B	Gray	
34250-0035	1x3 Single Key Polarization C	Brown	
34250-0036	1x3 Single Key Polarization D	Green	
34250-0049	1x3 Single Key Polarization A	Black	No
34250-0050	1x3 Single Key Polarization B	Gray	
34250-0051	1x3 Single Key Polarization C	Brown	
34250-0052	1x3 Single Key Polarization D	Green	

5.00mm (.197") Pitch MX150™ Cable Sealed Connector

34062
Single Row



Features and Benefits
- Compact 1.50mm (.059") terminal connector
- Meets USCAR footprints
- Uses cable sealed terminals
- Available with or without CPA
- Polarization options available

Reference Information
Packaging: Bag
Mates With: Direct connect only
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 15.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

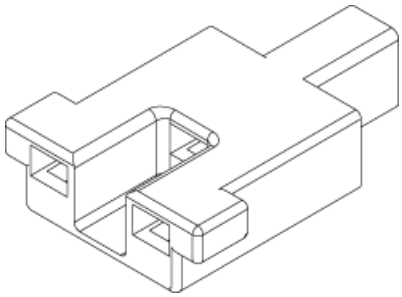
Mechanical
Contact Insertion Force: Less than 15N
Contact Retention to Housing: 100N min.
Wire Pull-Out Force: 90N min.
Mating Force: Less than 45N
Unmating Force: Less than 45N
Normal Force: Terminal dependent

Physical
Housing: PBT + 10% glass filled, UL 94-HB
Contact: Tin or Gold
Wire Gauge: 16 to 22 AWG
Operating Temperature: -40 to +125˚C

Order No.	Description	Color	CPA
34062-0001	1x2 Polarization A	Black	No
34062-0002	1x2 Polarization B	Gray	
34062-0003	1x2 Polarization C	Black	
34062-0004	1x2 Polarization D		
34062-0005	1x2 Polarization A	Black	Yes
34062-0006	1x2 Polarization B	Gray	
34062-0007	1x2 Polarization C	Black	
34062-0008	1x2 Polarization D		
34062-0009	1x2 Polarization D	Gray	No
34062-0010	1x2 Polarization D	Gray	Yes

2.29mm (.090") Diameter Cluster Block Housing

35573



Features and Benefits
- Connects to sealed hermetric header pins on compessor
- Impervious to oils and refrigerant
- Side grip for easy unmating

Reference Information
Product Specification: PS-35573-001
Packaging: Bag
Use With: 57920
Designed In: Millimeters

Electrical
Voltage: 230V
Current: 10.0A
Contact Resistance: 5 milliohms max.
Dielectric Withstanding Voltage: 1000V

Mechanical
Contact Retention to Housing: 2.27 kgf max.
Mating Force: 13.6 kgf max.
Contact Resistance: 10 milliohms max.
Unmating Force: 4.0 kgf min.

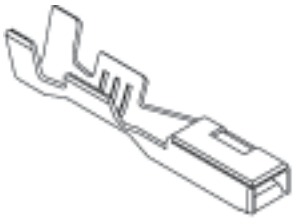
Physical
Housing: Polyester

Order No.	Description
35573-0300	Without Protector
35573-0310	With Protector

www.molex.com/customer.html?seriesNumber=35573

2.30mm (.090") Tab Terminal

35421
Female



Features and Benefits
- Housing-locking feature avoids deformation of terminal
- Accepts wide wire range (0.3 to 2.0mm^2)

Reference Information
Product Specification: PS-35282
Packaging: Reel
Mates With: 35420 terminal
Use With: 35284 housing
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

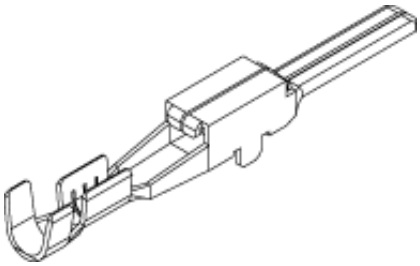
Mechanical
Contact Retention to Housing:
With TPA—10.0kgf min.
Wire Pull-Out Force: 6.0kgf min.
Mating Force: 10 circuits—14.0kgf max.
Unmating Force: 10 circuits—14.0kgf max.
Durability: 50 cycles

Physical
Contact: Copper Alloy
Plating: Tin
Operating Temperature: -40 to +85˚C

Order No.	Wire Range (mm^2)	Lead-free
35421-6702	AVS (CAVS) 0.30 to 0.50 (.012 to .020)	Yes
35421-6802	AVS (CAVS) 0.50 to 1.25 (.020 to .050)	
35421-6902	AVSS 2f	

2.30mm (.090") Tab Terminal

57919
Male



Features and Benefits
- Locking tab secures terminal to housing

Reference Information
Product Specification: CS-50660-001
Packaging: Reel
Mates With: 35421 Terminal
Use With: 35897 and 49016 housings
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 10.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

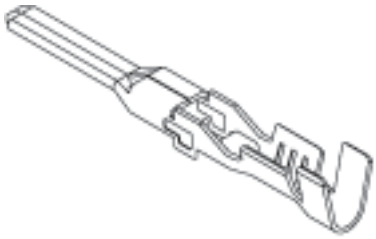
Physical
Contact: Brass
Plating: Contact Area—Pre-Tin
Strip Length: 4.20 to 5.00mm (.165 to .197")
Operating Temperature: -40 to +85˚C

Order No.	Wire Range (mm²)	Insulation Diameter	Lead-free
57919-6702	0.3-0.5	2.60mm (.102") max.	Yes
57919-6802	0.85-1.25	2.90mm (.115") max.	
57919-6902	2.0		

www.molex.com/customer.html?seriesNumber=57919

2.30mm (.090") Tab Terminal

35420
Male



Features and Benefits
- Housing-locking feature avoids deformation of terminal
- Accepts wide wire range (0.3 to 2.0mm²)
- Flat tab design offers low insertion force and good mating contact

Reference Information
Product Specification: PS-35282
Packaging: Reel
Mates With: 35421 terminal
Use With: 35282 housing
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing:
With TPA—10.0kgf min.
Wire Pull-Out Force: 6.0kgf min.
Mating Force: 10 circuits—14.0kgf max.
Unmating Force: 10 circuits—14.0kgf max.
Durability: 50 cycles

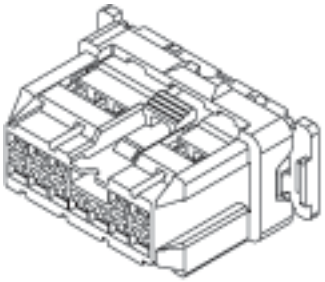
Physical
Contact: Brass
Plating: Tin
Operating Temperature: -40 to +85˚C

Order No.	Wire Range (mm²)	Lead-free
35420-9702	AVS (CAVS) 0.30 to 0.50 (.012 to .020)	Yes
35420-9802	AVS (CAVS) 0.50 to 1.25 (.020 to .050)	
35420-9902	AVSS 2f	

www.molex.com/customer.html?seriesNumber=35420

2.30mm (.090") Tab Wire-to-Wire Receptacle

35284
With Secondary Terminal Retention



Circuits	Order No.
6	35284-0610
8	35284-0810
10	35284-1010
12	35284-1210
16	35284-1610

Features and Benefits
- Sizes 6, 8, 10, 12 and 16 circuits
- Preloaded TPA
- Inertia lock mechanism for secure mating retention: 6, 8 and 10 circuits

Reference Information
Product Specification: PS-35282
Packaging: Bag
Mates With: 35282 housing
Use With: 35421 terminal
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

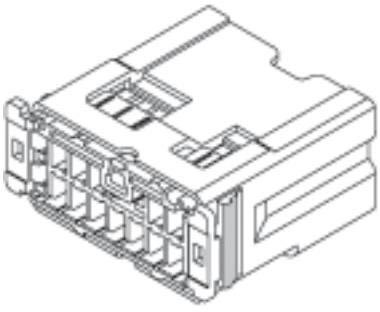
Mechanical
Contact Retention to Housing:
With TPA—10.0kgf min.
Mating Force: 10 circuits—14.1kgf max.
Unmating Force: 10 circuits—14.1kgf max.
Durability: 50 cycles

Physical
Contact: Polyester
TPA: Polyester
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=35284

2.30mm (.090") Tab Wire-to-Wire Plug

35282
With Secondary Terminal Retention



Circuits	Order No.
6	35282-0610
8	35282-0810
10	35282-1010
12	35282-1210
16	35282-1610

Features and Benefits
- Sizes 6, 8, 10, 12 and 16 circuits
- Preloaded TPA
- Inertia lock mechanism for secure mating retention: 6, 8 and 10 circuits
- Clip mounting feature on plug housing

Reference Information
Product Specification: PS-35282
Packaging: Bag
Mates With: 35284 housing
Use With: 35420 terminal
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing:
With TPA—10.0kgf min.
Mating Force: 10 circuits—14.1kgf max.
Unmating Force: 10 circuits—14.1kgf max.
Durability: 50 cycles

Physical
Contact: Polyester
TPA: Polyester
Operating Temperature: -40 to +85˚C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Crimp Terminal

50148

Order No.	Packaging	Lead-free
50148-8000	Reel	Yes
50148-8100	Bag	

Features and Benefits

- Unique spring-beam design provides high pressure and small deflection for high vibration applications
- Stabilizing bump at tip keeps terminal in place during mating

Reference Information

Packaging: Reel or bag
Use With: 52213
Designed In: Millimeters

Electrical

Voltage: 25V
Current: AVSS/CAVS 0.50 sq. (20 AWG)—4.0A
AVSS/CAVS 0.30 sq. (22 AWG)—3.0A

Physical

Contact: Phosphor Bronze
Plating: Tin
Wire Range: AVSS/CAVS 0.30 sq., 0.50 sq. (20 to 22 AWG)
Insulation Range: 1.40 to 1.90mm
Strip Length: 2.00 to 2.50mm

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Crimp Terminal

50147

Order No.	Packaging	Lead-free
50147-8000	Reel	Yes
50147-8100	Bag	

Features and Benefits

- Seal is in housing to simplify crimping process
- Raised split-beam design provides polarization

Reference Information

Packaging: Reel or bag
Use With: 52266
Designed In: Millimeters

Electrical

Voltage: 25V
Current: AVSS/CAVS 0.50 sq. (20 AWG)—4.0A
AVSS/CAVS 0.30 sq. (22 AWG)—3.0A

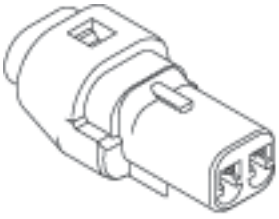
Physical

Contact: Phosphor Bronze
Plating: Tin
Wire Range: AVSS/CAVS 0.30 sq., 0.50 sq. (20 to 22 AWG)
Insulation Range: 1.40 to 1.90mm
Strip Length: 2.00 to 2.50mm

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Receptacle

52213

2-Circuit Version



Circuits	Order No.
2	52213-0211

Features and Benefits

- Size 2 circuits
- JIS D0203 S2 waterproof compliant
- Unique seal stopper design provides low insertion force
- For tight packaging applications
- User-friendly friction lock saves space and protects locking latch area
- Polarizing rib to ensure proper mating

Reference Information

Packaging: Tray
Mates With: 52266
Use With: 50148
Designed In: Millimeters

Electrical

Voltage: 25V
Current: 4.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical

Housing: Black glass-filled PBTP
Cap: Glass-filled PBTP
Wire End Seal: Silicone
Operating Temperature: -40 to +105˚C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Receptacle

52213

3 and 4-Circuit Version

Circuits	Order No.	Housing/Cap Color
3	52213-0311	Black
4	52213-0417	Brown

Features and Benefits

- Sizes 3 and 4 circuits
- JIS D0203 S2 waterproof compliant
- Unique seal stopper design provides low insertion force
- For tight packaging applications
- User-friendly friction lock saves space and protects locking latch area
- One-body wire and seal enables tighter spacing between terminals

Reference Information

Packaging: Tray
Mates With: 52266
Use With: 50148
Designed In: Millimeters

Electrical

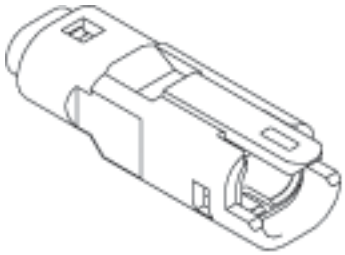
Voltage: 25V
Current: 4.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical

Housing/Cap: Glass-filled PBTP
Wire End Seal: Silicone
Operating Temperature: -40 to +105˚C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Plug

52266
2-Circuit Version



Circuits	Order No.
2	52266-0211

Features and Benefits
- Size 2 circuits
- JIS D0203 S2 waterproof compliant
- Unique seal stopper design provides low insertion force
- For tight packaging applications
- User-friendly friction lock saves space and protects locking latch area
- One-body wire and seal enables tighter spacing between terminals

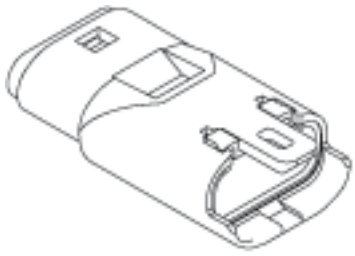
Reference Information
Packaging: Tray
Mates With: 52213
Use With: 50147
Designed In: Millimeters

Electrical
Voltage: 25V
Current: 4.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical
Housing: Black glass-filled PBTP
Cap: Glass-filled PBTP
Wire End Seal: Silicone
Seal Stopper: Glass-filled PBTP
Seal: Silicone
Operating Temperature: -40 to +105°C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Plug

52266
3 and 4-Circuit Version



Circuits	Order No.	Housing/Cap Color
3	52266-0311	Black
4	52266-0417	Brown

Features and Benefits
- Sizes 3 and 4 circuits
- JIS D0203 S2 waterproof compliant
- Unique seal stopper design provides low insertion force
- For tight packaging applications
- User-friendly friction lock saves space and protects locking latch area
- One-body wire and seal enables tighter spacing between terminals

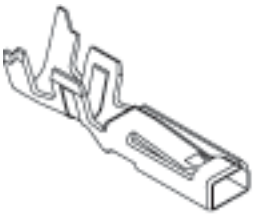
Reference Information
Packaging: Tray
Mates With: 52213
Use With: 50147
Designed In: Millimeters

Electrical
Voltage: 25V
Current: 4.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical
Housing/Cap: Glass-filled PBTP
Wire End Seal: Silicone
Seal Stopper: Glass-filled PBTP
Seal: Silicone
Operating Temperature: -40 to +105°C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Crimp Terminal

50039



Order No.	Packaging	Lead-free
50039-8000	Chain	Yes
50039-8100	Loose	

Features and Benefits

- Unique spring-beam design provides high pressure and small deflection for high vibration applications

Reference Information

Packaging: Chain or loose
Use With: 52117
Designed In: Millimeters

Electrical

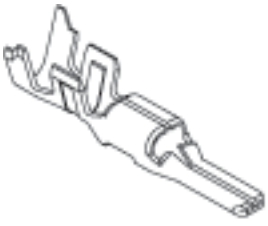
Voltage: 250V
Current: 3.0A

Physical

Contact: Phosphor Bronze
Plating: Tin
Wire Range: AVS 0.30 sq., CAVS 0.50 sq. (20 to 22 AWG)
Insulation Range: 1.50 to 1.90mm
Strip Length: 2.00 to 2.50mm

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Crimp Terminal

50038



Order No.	Packaging	Lead-free
50038-8000	Chain	Yes
50038-8100	Loose	

Features and Benefits

- Seal is in housing to simplify crimping process
- Raised body design provides polarization

Reference Information

Packaging: Chain or loose
Use With: 52116
Designed In: Millimeters

Electrical

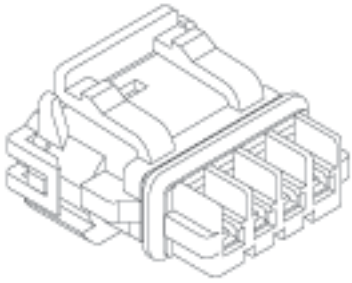
Voltage: 250V
Current: 3.0A

Physical

Contact: Phosphor Bronze
Plating: Tin
Wire Range: AVS 0.30 sq., CAVS 0.50 sq. (20 to 22 AWG)
Insulation Range: 1.50 to 1.90mm
Strip Length: 2.00 to 2.50mm

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Receptacle Housing

52117



Circuits	Order No.
2	52117-024X
3	52117-034X
4	52117-041X

Note: Replace X with
0 = White color
1 = Black color
2 = Red color (available in 2 and 3 circuits only)

Features and Benefits

- Sizes 2 to 4 circuits
- JIS D0203 S2 compliant
- User friendly friction lock provides secure connection

Reference Information

Packaging: Tray
Mates With: 52116 housing
Use With: 50039 terminal
Designed In: Millimeters

Electrical

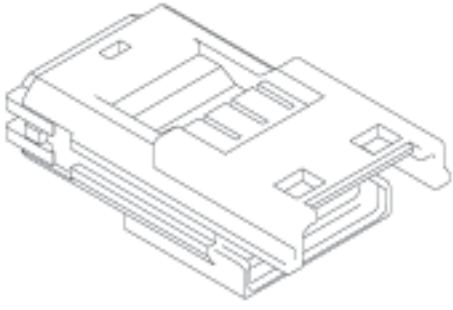
Voltage: 250V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical

Housing: Glass-filled PBTP
Cap: Glass-filled PBTP
Seal: Silicon
Operating Temperature: -40 to +105˚C

2.50mm (.098") Pitch Splash Proof Wire-to-Wire Plug Housing

52116



Circuits	Order No.
2	52116-024X
3	52116-034X
4	52116-041X

Note: Replace X with
0 = White color
1 = Black color
2 = Red color (available in 2 and 3 circuits only)

Features and Benefits

- Sizes 2 to 4 circuits
- JIS D0203 S2 compliant
- User friendly friction lock provides secure connection

Reference Information

Packaging: Tray
Mates With: 52117 housing
Use With: 50038 terminal
Designed In: Millimeters

Electrical

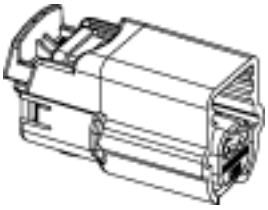
Voltage: 250V
Current: 3.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 Megohms min.

Physical

Housing: Glass-filled PBTP
Cap: Glass-filled PBTP
Seal: Silicon
Operating Temperature: -40 to +105˚C

2.54mm (.100") Pitch MX64™ Sealed Connectors

31402/31403/31404 Single Row Female



Features and Benefits

- Meets all USCAR footprints and testing requirements
- Ability to accommodate Ford, General Motors, Daimler-Chrysler and general market-approved female terminals
- Matte seal design
- Available with or without CPA
- Polarization options available
- 31402 for Ford applications
- 31403 for Daimler Chrysler and general market applications
- 31404 for General Motors applications

Reference Information

Packaging: Bag
Mates With: Direct connect only
Designed In: Millimeters

Electrical

Voltage: 250V
Current: 7.0 to 10.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V DC
Insulation Resistance: 20 Megohms min.

Mechanical

Contact Insertion Force: Less than 15N
Contact Retention to Housing: 110N min.
Wire Pull-Out Force: 90N min.
Mating Force: Less than 75N
Unmating Force: Less than 75N
Normal Force: Terminal dependent

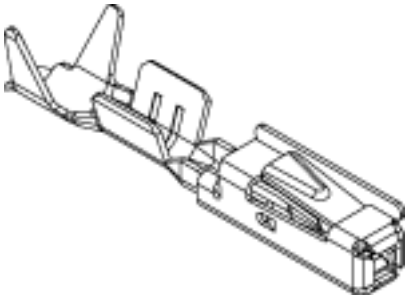
Physical

Housing: PBT + 15% glass filled
Contact: Tin or Gold
Wire Gauge: 18 to 22 AWG
Operating Temperature: -40 to +125˚C

Order No.	Description	Color	CPA Option
31402-2100	1x2 Polarization A	Black	No
31402-2200	1x2 Polarization B	Gray	
31402-2400	1x2 Polarization D	Green	
31402-2700		Black	
31402-2110	1x2 Polarization A	Black	Yes
31402-2210	1x2 Polarization B	Gray	
31402-2410	1x2 Polarization D	Green	
31402-2710		Black	
31402-3100	1x3 Polarization A	Black	No
31402-3110			Yes
31402-6100	1x6 Polarization A		No
31402-6110			Yes
31403-2100	1x2 Polarization A		No
31403-2110			Yes
31403-3100	1x3 Polarization A		No
31403-3110			Yes
31403-3400	1x3 Polarization D	Green	No
31403-3410	1x3 Polarization D		Yes
31403-3700	1x3 Polarization D	Black	No
31403-3710	1x3 Polarization D		Yes
31403-6100	1x3 Polarization A		No
31403-6110			Yes
31404-3100			No
31404-3400	1x3 Polarization D	Green	No
31404-3700	1x3 Polarization D	Black	No
31404-3110	1x3 Polarization A		Yes
31404-3410	1x3 Polarization D	Green	Yes
31404-3710	1x3 Polarization D	Black	Yes
31404-6100	1x6 Polarization A		No
31404-6110			Yes

2.54mm (.100") Pitch MOX Crimp Terminal

98658
Female



Features and Benefits
- Two-piece laser-welded terminal
- Two points of contact
- For wire termination
- Two-piece terminal with sleeve design
- Steel sleeve protects mating area
- Polarization rib for terminal orientation during assembly
- Long contact area provides secure electrical connection

Reference Information
Product Specification: PS-98658-005
Packaging: Reel
Mates With: 0.635mm (.025") square pin terminals
Use With: MOX housings and various other connectors
Designed In: Millimeters

Electrical
Voltage: 14V DC
Current: 6.5A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

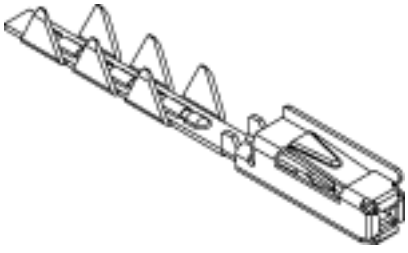
Mechanical
Contact Insertion Force: 3.0N max.
Contact Retention to Housing: 40.0N min.
Wire Pull-Out Force: 50N min. on 0.22mm² wire
Insertion Force to Housing: 5.0N max. (for unsealed); 10.0N max. (for sealed connector)
Durability: 20 cycles

Physical
Contact: High Conductive Copper Alloy, 0.635mm (.025"), square
Plating: Pre-plated
Contact Area: Tin—1 to 3µm min.; Gold—0.4µm min.
Underplating: Nickel (for Gold-plated version only)
Operating Temperature: -40 to +125°C

Order No.	Plating	Wire Size (AWG)	Wire size (mm²)	Wire Insulation Diameter	Wire Strip Length	Lead-free
98658-1211	Tin	20-24	0.22-0.60	1.20-1.80mm (.047-.071")	3.00mm	Yes
98658-1212		18-22	0.75	1.70mm (.067") max	3.50mm	
98658-1213		20-24	0.22-0.50	1.20-1.50mm (.047-.060")	3.00mm	
98658-1221	Select Gold	20-24	0.22-0.60	1.20-1.80mm (.047-.071")		
98658-1222		18-22	0.75	1.70mm (.067") max	3.50mm	
98658-1223		20-24	0.22-0.50	1.20-1.50mm (.047-.060")	3.00mm	
98658-1231	2 points Select Gold	20-24	0.22-0.60	1.20-1.80mm (.047-.071")		
98658-1232		18-22	0.75	1.70mm (.067") max	3.50mm	
98658-1233		20-24	0.22-0.50	1.20-1.50mm (.047-.060")	3.00mm	

2.54mm (.100") Pitch MOX FFC/FPC Crimp Terminal

98194
Female



Features and Benefits
- Two-piece laser welded terminal
- Two contact points
- For FFC/FPC crimp termination
- High-performance alloy for increased conductivity and temperature
- Design allows for primary and secondary locking
- Allows flex to interface with existing male connectors and modules
- Allows mass termination of contacts
- Custom housings available

Reference Information
Packaging: Reel
Mates With: 0.635mm (.025") square pin terminals
Use With: MOX housings and various other connectors
Designed In: Millimeters

Electrical
Voltage: 14V DC
Current: 3.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 3.0N max.
Contact Retention to Housing: 70.0N min. (for 2 crimped terminals)
Wire Pull-Out Force: 70.0N min. (for 2 crimped terminals)
Insertion Force to Housing: 5.0N max. per circuit
Durability: 20 cycles

Physical
Contact: High conductive Copper Alloy, 0.635mm (.025"), square
Sleeve: Stainless Steel
Plating: Tin or Select Gold
Conductor Width: 1.57mm (.062")
Conductor Thickness: 0.063 to 0.100mm (.002 to .004")
Cable Thickness: 0.33mm (.013") max. FFC/FPC
Operating Temperature: -40 to +105°C

Order No.	Plating	GAP Area	Crimping Area	Lead-free
98194-1211	Tin	Tin: 1.0-3.0µm	Tin: 1.0-3.0µm	Yes
98194-1221	Select Gold	Gold: 0.3µm Nickel: 1.0µm	Tin: 1.0-5µm Nickel: 1.0µm	

2.54mm (.100") Pitch MOX Receptacle Housing

98193

Single Row, Vertical With TPA

Features and Benefits

- Reusable one-piece secondary locking
- Inertial locking feature
- One-piece design with integrated secondary lock for easy use

Reference Information

Packaging: Bag
Use With: 98658
Designed In: Millimeters

Electrical

Voltage: 14V DC
Current: 6.0A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 5.0N (1.12 lb) max.
Contact Retention to Housing: 40.0N (9 lb) min.
Wire Pull-Out Force: 100.0N (22.5 lb) min.
Mating Force: 60.0N (13.5 lb) max.
Unmating Force: 60.0N (13.5 lb) max.
Durability: 20 cycles (with Tin-plated terminal)

Physical

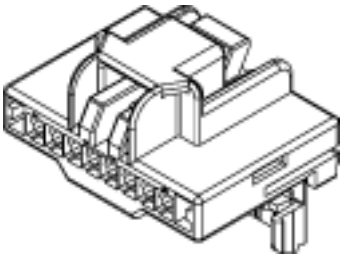
Housing: Black PA Polyamide (nylon) 6, UL 94V-2
Operating Temperature: -40 to +85˚C

Circuits	Order No.	Lead-free
6	98193-0001	Yes

2.54mm (.100") Pitch MOX Receptacle Housing

98545

Single Row, Vertical With TPA



Features and Benefits

- Reusable two-piece secondary locking feature
- Three color and mechanical codings
- One-piece design with integrated secondary lock for easy use

Reference Information

Packaging: Bag
Use With: 98658
Designed In: Millimeters

Electrical

Voltage: 14V DC
Current: 6.0A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 5.0N (1.12 lb) max.
Contact Retention to Housing: 40.0N (9 lb) min.
Wire Pull-Out Force: 100N (22.5 lb) min.
Mating Force: 60.0N (13.5 lb) max.
Unmating Force: 60.0N (13.5 lb) max.
Durability: 20 cycles (with Tin-plated terminal)

Physical

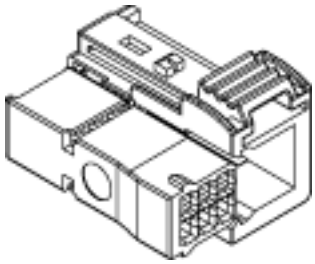
Housing: PBT Polyester, HB, UL 94-HB
Operating Temperature: -40 to +100˚C

Circuits	Order No.	Color	Lead-free
8	98545-0001	Black	Yes
	98545-0002	Gray	
	98545-0003	Blue	

2.54mm (.100") Pitch MOX Receptacle Housing

98298

2 by 3 Circuits Dual Row, Vertical Breakable



Features and Benefits

- Reusable two-piece secondary locking feature
- Inertial locking feature
- Six color and mechanical codings
- One-piece design with integrated secondary lock for easy use

Reference Information

Packaging: Bag
Mates With: Industry-standard interface
Use With: 98658
Designed In: Millimeters

Electrical

Voltage: 14V DC
Current: 6.0A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 5.0N (1.12 lb) max.
Contact Retention to Housing: 40.0N (9 lb) min.
Wire Pull-Out Force: 100N (22.5 lb) min.
Mating Force: 65.0N (14.6 lb) max.
Unmating Force: 60.0N (13.5 lb) max.
Durability: 20 cycles (with Tin-plated terminals)

Physical

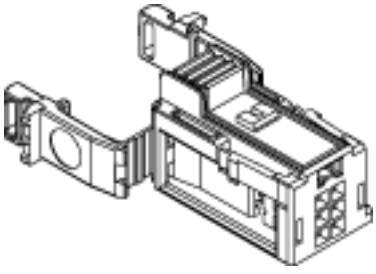
Housing: Glass-filled PBT Polyester, HB, UL 94-HB
Operating Temperature: -40 to +100˚C

Circuits	Order No.	Color	Lead-free
6	98298-0001	Black	Yes
	98298-0002	White	
	98298-0003	Green	
	98298-0004	Brown	
	98298-0005	Gray	
	98298-0006	Blue	

2.54mm (.100") Pitch MOX Receptacle Housing

98192

2 by 3 Circuits Dual Row, Vertical With TPA



Features and Benefits

- Reusable secondary locking
- Inertial locking feature
- One-piece design with integrated secondary lock for easy use

Reference Information

Packaging: Bag
Mates With: Industry-standard interface
Use With: 98658
Designed In: Millimeters

Electrical

Voltage: 14V DC
Current: 6.0A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 5.0N (1.12 lb) max.
Contact Retention to Housing: 40.0N (9 lb) min.
Wire Pull-Out Force: 100N (22.5 lb) min.
Mating Force: 60.0N (13.5 lb) max.
Unmating Force: 60.0N (13.5 lb) max.
Durability: 20 cycles (with Tin-plated terminal)

Physical

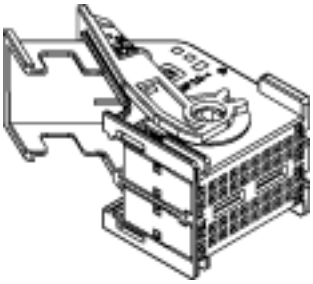
Housing: Black PA Polyamide (nylon) 6, UL 94V-2
Operating Temperature: -40 to +85˚C

Circuits	Order No.	Lead-free
6	98192-0001	Yes

2.54mm (.100") Pitch MOX Receptacle Kit

98686

4 Rows
Right Angle



Features and Benefits
- Lever provides low mating force
- Secondary locking activated by inserting of terminal housing into the carrier
- Two color codings and keys available

Reference Information
Packaging: Bag
Mates With: 98184
Use With: 98658 or 98194
Designed In: Millimeters

Electrical
Current: 5.0A
Contact Resistance: 7 milliohms max.
Insulation Resistance: 10 Megohms min.

Mechanical
Contact Insertion Force: 10.0N (2.25 lb) max.
Contact Retention to Housing: 30.0N (6.74 lb) min.
Wire Pull-Out Force: 70.0N (15.74 lb)
Mating Force: 70.0N (15.74 lb)
Unmating Force: 70.0N (15.74 lb)

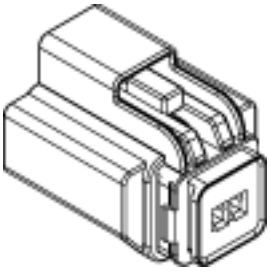
Physical
Housing: Glass-filled PBT Polyester, UL 94-HB
Operating Temperature: -25 to +105˚C

Circuits	Order No.	Color	Key	Lead-free
40	98686-0001	Black	Key 1	Yes
	98686-0002	Blue	Key 2	

2.54mm (.100") Pitch MOX Receptacle Crash Sensor

98696

Vertical



Features and Benefits
- Two-piece design
- Inertial locking feature
- Sealed version available

Reference Information
Packaging: Bag
Mates With: Industry-standard interface
Use With: 98658
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 6.0A
Contact Resistance: 8 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 5.0N (1.12 lb) max.
Contact Retention to Housing: 40.0N (9 lb) min.
Wire Pull-Out Force: 100.0N (22.5 lb) min.
Mating Force: 60.0N (13.5 lb) max.
Unmating Force: 60.0N (13.5 lb) max.
Durability: 20 cycles (with Tin-plated terminal)

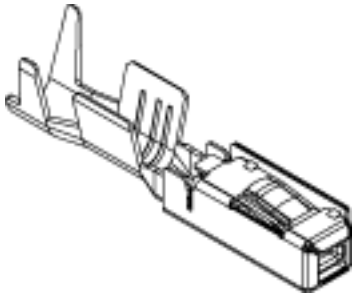
Physical
Housing: Black glass-filled PBT Polyester, HB, UL 94-HB
Operating Temperature: -40 to +100˚C

Circuits	Order No.	Lead-free
2	98696-1002	Yes

3.33mm (.131") Pitch MOX Power Crimp Terminal

98195

Female



Features and Benefits

- Two-piece laser welded terminal
- Three contact points
- Protection through sleeve
- Wire crimp
- High-performance alloy for increased conductivity and temperature
- Locking latch
- Keying with polarization rib

Reference Information

Product Specification: PS-98195-001
Packaging: Reel
Mates With: 1.50mm (.059") blade terminals
Use With: 98944 and 98950
Designed In: Millimeters

Electrical

Voltage: 14V DC
Current: 18.0A
Contact Resistance: 4 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 5.0N max.
Contact Retention to Housing: 60.0N min.
Wire Pull-Out Force: 120.0N min. on 1.0mm² wire
Insertion force to housing: 5.0N max. (for unsealed), 15.0N max. (for sealed connector)
Durability: 20 cycles

Physical

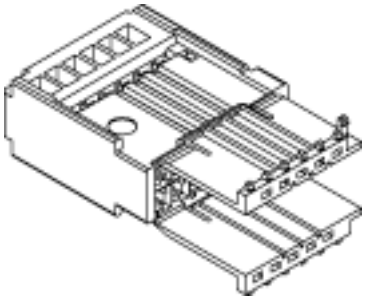
Contact: 1.5mm (.059") high conductive Copper Alloy
Sleeve: Stainless Steel
Plating: Tin
Contact Area: 1.0 to 3.0µm Tin
Operating Temperature: -40 to +125˚C

Order No.	Wire Size	Wire Insulation Diameter	Wire Strip Length
98195-1211	0.35-0.50mm² (20-22 AWG)	1.20-1.40mm	5.0 0/-0.4mm
98195-1212	0.50-1.00mm² (18-20 AWG)	1.40-1.80mm	
98195-1213	>1.00-2.50mm² (14-16 AWG)	2.30-2.80mm	

www.molex.com/product/mox.html

2.54mm (.100") Pitch MOST Receptacle Housing

98684



Features and Benefits

- TPA integrated by filme hinge function
- Fits into 98681-1001 and 98681-1002
- Keying prevents wrong insertion into housing frame
- Terminal cavities designed for Molex MOX 0.64mm (.025") terminals
- Conforms to USCAR-2 Rev. 3

Reference Information

Product Specification: PS-98681-001
Packaging: Box
Mates With: 91500, 91547, 98681
Use With: 98658

Electrical

Voltage: 9 to 16V DC (operating normal)
Current: 7.5A max.
Contact Resistance: 100 milliohms max.

Mechanical

Contact Insertion Force: 30.00N (6.74 lb)
Contact Retention to Housing: 60.00N (13.49 lb)
Mating Force: 75.00N (16.86 lb)
Unmating Force: 75.00N (16.86 lb)
Durability: 11 mating cycles

Physical

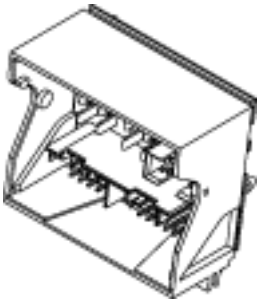
Housing: PBT Polyester, UL 94-HB
Operating Temperature: -40 to +85˚C

Circuits	Order No.	Color Coding	Key	Lead-free
12	98684-0001	Black	Key A	Yes
	98684-0002	Natural	Key B	

2.54mm (.100") Pitch MOST Junction Box

91616

Vertical, without 10.0A Fuse



Circuits	Order No.	Lead-free
40	91616-0001	Yes

Features and Benefits

- Complies with MOST specifications and is therefore a drop-in replacement part
- Fuse options available
- Mini-PCB assembly available
- Lead-free

Reference Information

Product Specification: PS-91616-001
Packaging: Tray
Designed In: Millimeters

Electrical

Voltage: 16V
Current: 6.0A
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 Megohms min.

Mechanical

Insertion Force to PCB: 70.0N (15.74 lb)
Durability: 30 cycles

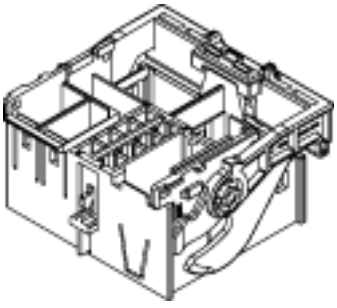
Physical

Housing: Glass-filled PA Polyamide (nylon), UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—Tin
PCB Thickness: 1.6mm (0.62")
Operating Temperature: -40 to +85˚C

5.08mm (.200") Pitch MOST Frame Receptacle Housing

98681

With Lever, 40 Electrical and 4 Optical Circuits (Optional)



Order No.		Lead-free
With Cable Cover	Without Cable Cover	
98681-1001	98681-1002	Yes

Features and Benefits

- MOST corporation interface
- Plastic optical fiber option integrated
- Version with feature to receive wire cap/strain relief 98660-0001
- Conforms to USCAR-2 Rev. 3 and Ford SDS Rev. 10

Reference Information

Product Specification: PS-98681-001
Packaging: Box
Mates With: 91616, 91574
Use With: 98660, 98684, 98685
Designed In: Millimeters

Electrical

Voltage: 9 to 16V DC (operating normal)
Current: 24.0A max.
Contact Resistance: 5 milliohms max.

Mechanical

Contact Insertion Force: <30.00N (6.74 lb)
Contact Retention to Housing: >60.00N (13.49 lb)
Mating Force: 75.00N (16.86 lb)
Unmating Force: 75.00N (16.86 lb)
Durability: 11 mating cycles

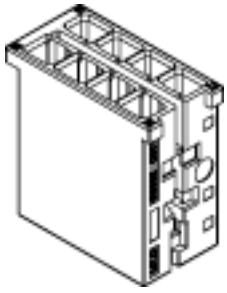
Physical

Housing: Black glass-filled SPS/PA 6/6, UL 94-HB
Operating Temperature: -40 to +85˚C

5.08mm (.200") Pitch MOST Receptacle Power Connector

98685

With TPA Lock



Circuits	Order No.	Lead-free
8	98685-1001	Yes

Features and Benefits

- Fits to MOST frame receptacle housing 98681-1001 and 98681-1002
- Delivered with Terminal Position Assurances (TPA) in pre-lock position
- Conforms to USCAR-2 Rev. 3 and Ford SDS Rev. 10

Reference Information

Product Specification: PS-98681-001
Packaging: Box
Mates With: 91500, 91547 and 98681
Use With: 2.80mm (.110") MPQ terminals

Electrical

Voltage: 9 to 16V DC (operating normal)
Current: 24.0A max.
Contact Resistance: 5 milliohms max.

Mechanical

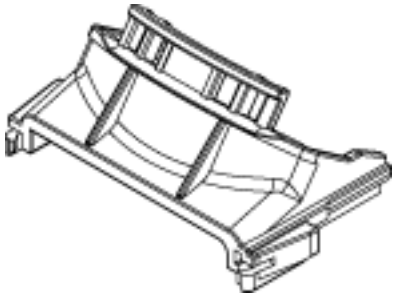
Contact Insertion Force: 30.00N (6.74 lb) min.
Contact Retention to Housing: 60.00N (13.49 lb) max.
Mating Force: 75.00N (16.86 lb)
Unmating Force: 75.00N (16.86 lb)

Physical

Housing: Black glass-filled SPS Crystalline Polymer, UL 94-HB
Operating Temperature: -40 to +85˚C

5.08mm (.200") Pitch MOST Strain Relief Cable Cover

98660



Order No.	Lead-free
98660-0001	Yes

Features and Benefits

- Provides 45˚ wire
- Positive clip
- Conforms to USCAR-2 Rev. 3 and Ford SDS Rev. 10

Reference Information

Product Specification: PS-98681-001
Packaging: Bag
Use With: 98681-1001

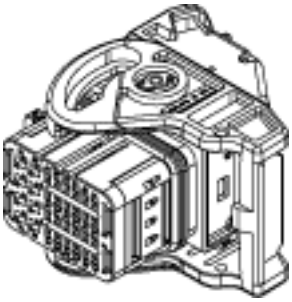
Physical

Housing: Black PBT Polyester
Operating Temperature: -40 to +85˚C

2.54mm (.100")/ 3.50mm (.138") Pitch Wire-to-Board CMC Hybrid Crimp Housing

98944

Right Angle, 32 Circuits



Features and Benefits

- Secondary locking
- Gel grommet seal to facilitate harness assembly (no cavity plug necessary for unplugged cavities)
- Two wire sizes: hybrid 0.635 and 1.50mm (.025 and .060") connector

Reference Information

Packaging: Tray
Mates With: 98228 (112-way CMC Header) and various other CMC headers
Use With: 98658, 98915-10x9 terminals and 98649-1001 (wire cap)
Designed In: Millimeters

Electrical

Voltage: 14V
Current:
0.635mm (.025") terminal—6.0A max.
1.50mm (.060") terminal—11.0A max.
Contact Resistance:
0.635mm (.025") terminal—8 milliohms max.
1.50mm (.060") terminal—4 milliohms max.
Dielectric Withstanding Voltage: 1000V AC min.
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force:
0.635mm (.025") terminal—10.00N (2.25 lb)
1.50mm (.060") terminal—15.00N (3.37 lb)
Contact Retention to Housing:
0.635mm (.025") terminal—60.00N (13.49 lb)
1.50mm (.060") terminal—100.00N (22.48 lb)
Wire Pull-Out Force: 100.00N (22.48 lb)
Mating Force: 80.00N (17.98 lb) max.
Unmating Force: 80.00N (17.98 lb) max.
Durability: 20 mating cycles

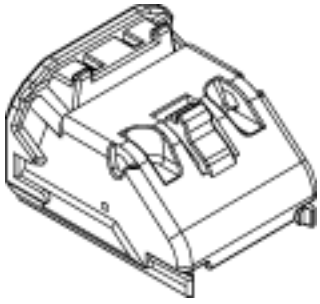
Physical

Housing: Glass-filled PBT Polyester
Operating Temperature: -40 to +100˚C

Circuits	Order No.		Color	Lead-free
	Assembled Right Wire Output	Assembled Left Wire Output		
32	98944-2001	98944-3001	Black	Yes
	98944-2002	98944-3002	Gray	
	98944-2003	98944-3003	Brown	
	98944-2004	98944-3004	Green	
	98944-2005	98944-3005	Blue	

2.54mm (.100")/ 3.50mm (.138") Pitch CMC Wire Cap

98649



Features and Benefits

- Fixture for strain relief
- Enable right angle wire output in two directions

Reference Information

Packaging: Box
Use With: 98944-200X or 98944-300X
Designed In: Millimeters

Physical

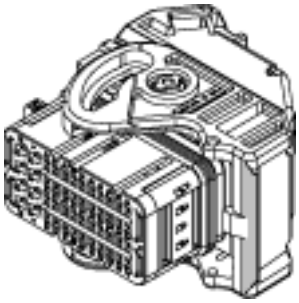
Material: Black PA6—Polyamide

Circuits	Order No.	Lead-free
32	98649-1001	Yes

2.54mm (.100")/ 3.50mm (.138") Pitch Wire-to-Board CMC Hybrid Crimp Housing

98950

Right Angle, 48 Circuits



Features and Benefits

- Secondary locking
- Gel grommet seal to facilitate harness assembly (no cavity plug necessary for unplugged cavities)
- Two wire sizes: hybrid 0.635 (.025 and .060") and 1.50mm connector

Reference Information

Packaging: Tray
Mates With: 98228 (112-way CMC Header) and various other CMC headers
Use With: 98658, 98915-10x9 terminals and 98649-1001 (wire cap)
Designed In: Millimeters

Electrical

Voltage: 14V
Current: 0.635mm (.025") terminal—6A max.
1.50mm (.060") terminal—11A max.
Contact Resistance:
0.635mm (.025") terminal—8 milliohms max.
1.50mm (.060") terminal—4 milliohms max.
Dielectric Withstanding Voltage: 1000V AC min.
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force:
0.635mm (.025") terminal—10.00N (2.25 lb)
1.50mm (.060") terminal—15.00N (3.37 lb)
Contact Retention to Housing:
0.635mm (.025") terminal: 60.00N (13.49 lb)
1.50mm (.060") terminal: 100.00N (22.48 lb)
Wire Pull-Out Force: 100.00N (22.48 lb)
Mating Force: 80.00N (17.98 lb) max.
Unmating Force: 80.00N (17.98 lb) max.
Durability: 20 mating cycles

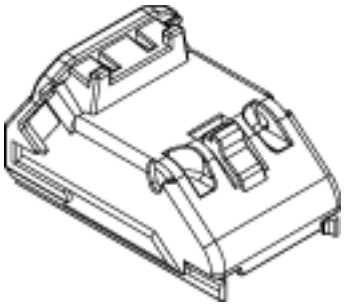
Physical

Housing: Glass-filled PBT Polyester
Operating Temperature: -40 to +100°C

Circuits	Order No.		Color	Lead-free
	Assembled Right Wire Output	Assembled Left Wire Output		
48	98950-2001	98950-3001	Black	Yes
	98950-2002	98950-3002	Gray	
	98950-2003	98950-3003	Brown	
	98950-2004	98950-3004	Green	
	98950-2005	98950-3005	Blue	

2.54mm (.100")/ 3.50mm (.138") Pitch CMC Wire Cap

98655



Features and Benefits

- Fixture for strain relief
- Enable right angle wire output in two directions

Reference Information

Packaging: Box
Use With: 98950-200X or 98950-300X
Designed In: Millimeters

Physical

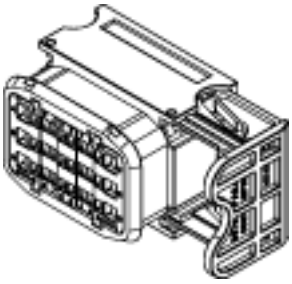
Material: Black PA6—Polyamide

Circuits	Order No.	Lead-free
48	98655-1001	Yes

3.33mm (.131")/ 4.20mm (.165") Pitch NSCC Wire-to-Wire Hybrid Receptacle Housing

98122

Triple Rows
Sealed, Vertical



Features and Benefits

- Secondary locking
- Slide to reduce mating force
- Slide orientation right or left
- Grommet seal and perimeter seal
- Color keying
- Two wire sizes: hybrid 1.5 and 2.8mm (.060 and .110") connector

Reference Information

Packaging: Box
Mates With: 98761
Use With: NSCC 1.5 terminal
Designed In: Millimeters

Electrical

Voltage: 13V
Current: 1.5mm (.060")—13.0A
2.8mm (.110")—22.0A
(see Sicma terminal specification for 1.5 and 2.8mm terminals)
Contact Resistance: 1.5mm (.060")—5 milliohms max.
2.8mm (.110")—4 milliohms max.
Dielectric Withstanding Voltage: 1000 VAC or 1400 VDC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force:
1.5mm (.060")—25.0N (5.62 lb) max.
2.8mm (.110")—30.0N (6.74 lb) max.
Contact Retention to Housing: 120.0N (26.98 lb) min.
Wire Pull-Out Force: 120.0N (26.98 lb)
Mating Force: 85.0N (19.11 lb) max. (fully loaded)
Unmating Force: 85.0N (19.11 lb) max. (fully loaded)
Durability: 10 mating cycles

Physical

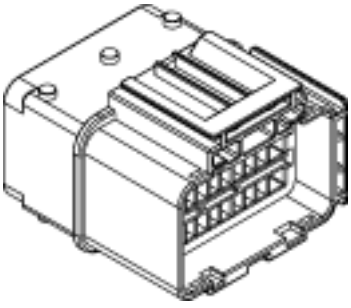
Housing: Glass-filled PBT Polyester, UL 94V-HB
Operating Temperature: -40 to +125˚C
Sealing Class: 500 mbars (7.25 psi)

Circuits	Order No.	Color	Slide Orientation	Lead-free
30	98122-1001	Black	Right	Yes
	98122-1002	Brown		
	98122-1003	Gray		
	98122-1005	Black	Left	
	98122-1006	Brown		
	98122-1007	Gray		

3.33mm (.131")/ 4.20mm (.165") Pitch NSCC Wire-to-Wire Hybrid Plug Housing

98761

Triple Rows
Sealed, Vertical



Features and Benefits

- Secondary locking feature
- Slide to reduce mating force
- Slide orientation right or left possible
- Grommet seal and perimeter seal
- Color keying
- Two wire sizes: hybrid 1.50 and 2.80mm (.060 and .110") connector

Reference Information

Packaging: Box
Mates With: 98122
Use With: Sicma 1.5 and 2.8mm (.060 and .110") male terminals
Designed In: Millimeters

Electrical

Voltage: 13V
Current: 1.5mm (.060")—13.0A
2.8mm (.110")—22.0A
(see FCI Sicma terminal specification for 1.5 and 2.8mm terminals)
Contact Resistance: 1.5mm (.060")—5 milliohms max.
2.8mm (.110")—4 milliohms max.
Dielectric Withstanding Voltage: 1000V AC or 1400V DC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force:
1.5mm (.060")—15.0N (3.37 lb) max.
2.8mm (.110")—20.0 N (4.50 lb) max.
Contact Retention to Housing: 120.0 N (26.98 lb) min.
Wire Pull-Out Force: 120.0N (26.98 lb)
Mating Force: 85.0N (19.11 lb) max. (fully loaded)
Unmating Force: 85.0N (19.11 lb) max. (fully loaded)
Durability: 10 mating cycles

Physical

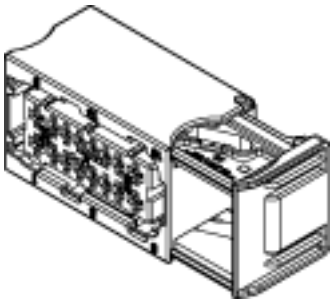
Housing: Glass-filled PBT Polyester, UL 94-HB
Sealing Class: 500 mbars (7.25 psi)
Operating Temperature: -40 to +125˚C

Circuits	Order No.	Color	Lead-free
30	98761-1001	Black	Yes
	98761-1002	Brown	
	98761-1003	Gray	

3.33mm (.131")/ 6.00mm (.236") Pitch NSCC Hybrid Inline Receptacle Housing

98273

Dual Row, Vertical with Slide



Features and Benefits

- Secondary locking for 1.54 and 2.8mm (.060 and .110") terminals
- Slide to reduce mating force
- Right slide orientation
- Hole feature to seal the slide in locked position
- Six mechanical codings correlating with 6 housing colors

Reference Information

Packaging: Box
Mates With: 98276
Use With: 98897 and 98898
Designed In: Millimeters

Electrical

Voltage: 13.5V
Current:
1. 50mm—7.0A max. at 85˚C crimped on 2.0mm² wire
2. 80mm—15.0A max. at 85˚C crimped on 4.0mm² wire

Dielectric Withstanding Voltage: 1000V min.
Insulation Resistance: 200 Megohms min.

Mechanical

Contact Insertion Force: 1.5mm (.060")—5.0N max.
2.8mm (.110")—8.0N max.
Contact Retention to Housing: 1.5mm (.060")—100.0N min.
2.8mm (.110")—100.0N min.
Mating Force: 60.0N max.
Unmating Force: 20.0N min.
Normal Force: 150.0N min.
Durability: 20 cycles

Physical

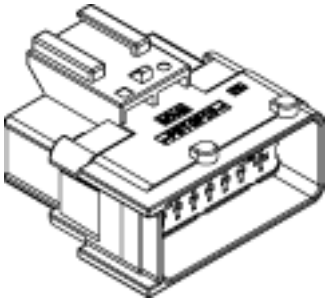
Housing: Glass-filled PBT Polyester, UL 94-HB
Operating Temperature: -40 to +125˚C

Circuits	Order No.	Color	Lead-free
16	98273-1001	Black	Yes
	98273-1002	Green	
	98273-1003	Blue	
	98273-1004	White	
	98273-1005	Brown	
	98273-1006	Gray	

3.33mm (.131")/ 6.00mm (.236") Pitch NSCC Hybrid Inline Plug Housing

98276

Dual Row, Vertical



Features and Benefits

- Secondary locking for 1.5 and 2.8mm (.060 and .110") terminals
- Six mechanical codings correlating with 6 housing colors
- Clip feature for standard fir tree clip

Reference Information

Packaging: Box
Mates With: 98273
Use With: 1.5 and 2.8mm blade terminals
Designed In: Millimeters

Electrical

Voltage: 13.5V
Dielectric Withstanding Voltage: 1000V min.
Insulation Resistance: 200 Megohms min.

Mechanical

Contact Insertion Force: 1.5mm (.060")—5.0N max.
2.8mm (.110")—8.0N max.
Contact Retention to Housing: 1.5mm (.060")—100.0N min.
2.8mm (.110")—100.0N min.
Mating Force: 60.0N max.
Unmating Force: 20.0N min.
Normal Force: 150N min.
Durability: 20 cycles

Physical

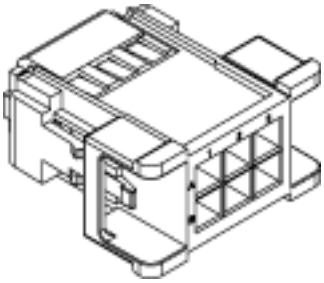
Housing: Glass-filled PBT Polyester, UL 94-HB
Operating Temperature: -40 to +125˚C

Circuits	Order No.	Color	Lead-free
16	98276-1001	Black	Yes
	98276-1002	Green	
	98276-1003	Blue	
	98276-1004	White	
	98276-1005	Brown	
	98276-1006	Gray	

5.00mm (.197") Pitch NSCC Wire-to-Board Receptacle Housing

98438

Vertical, with Bridges For 2.80mm (.110") Tab



Features and Benefits

- Designed for 2.80mm (.110") terminals from Molex
- Secondary locking
- Six mechanical codings available
- Two bridges to avoid damaging of latches
- Unsealed connector system

Reference Information

Packaging: Box
Mates With: Any 2.80mm (.110") header
Use With: 98898 2.80mm (.110") UCC terminals
Designed In: Millimeters

Electrical

Current: 15.0A max. @ 85˚C
Dielectric Withstanding Voltage: 1000V AC or 1400V DC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 10.0N (2.25 lb) max.
Contact Retention to Housing: 80.0N (17.98 lb) min.
Mating Force: 60.0N (13.49 lb) max.
Unmating Force: 150.0N (33.72 lb) max.

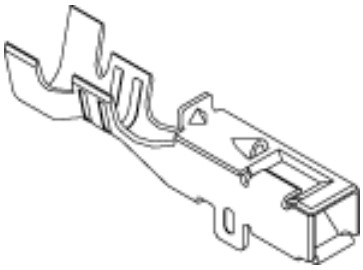
Physical

Housing: PBT Polyester, UL 94-HB
Operating Temperature: -40 to +105˚C

Circuits	Order No.	Color	Lead-free
6	98438-1001	Natural	Yes
	98438-1002	Black	
	98438-1003	Gray	
	98438-1004	Blue	
	98438-1005	Brown	
	98438-1006	Red	

4.00mm (.157") Pitch OBD-II Wire-to-Wire Terminal

50420
Female



Order No.	Wire Range (mm²)	Lead-free
50420-8000	AVS 0.3-0.5	Yes
	AVS 0.30f-0.75f	
	AVSS 0.50-0.85	
	AVSS 0.50f-0.75f	
	CAVS 0.50-0.85	

Features and Benefits
- Two-point contact design provides a redundant electrical interface
- Accepts retainer for additional terminal retention

Reference Information
Product Specification: PS-50420-0800
Packaging: Reel
Use With: 51115 and 51116
Designed In: Millimeters

Electrical
Voltage: 30V
Current: 6.0A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Physical
Contact: Phosphor Bronze
Plating: Contact Area—Tin
Insulation Diameter: 1.60 to 2.30mm (.024 to .091")
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=50420

4.00mm (.157") Pitch OBD-II Wire-to-Wire Terminal

57964
Male

Order No.	Lead-free
57964-9702	Yes

Features and Benefits
- Locking tab secures terminal to housing

Reference Information
Product Specification: PS-50420-0800
Packaging: Reel
Use With: 68503-1602
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 6.0A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

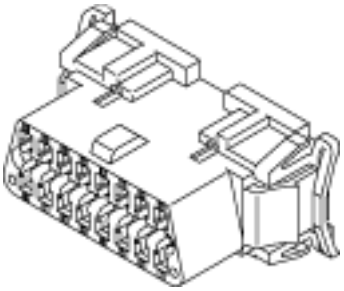
Physical
Contact: Brass
Plating: Contact Area—Tin
Underplating: Copper
Strip Length: 3.50 to 4.00mm (.138 to .157")
Wire Range: AVS (CAVS) 0.3 to 0.5
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=57964

4.00mm (.157") Pitch OBD-II Wire-to-Wire Housing

51115

Female, Panel Mount Type



Circuits	Order No.
16	51115-1601
	51115-1611

Features and Benefits

- Size 16 circuits only
- SAE J1962 standard for no board diagnostic
- Panel mount type

Reference Information

Product Specification: PS-50420-0800
Packaging: Bag
Mates With: 51117 TPA
Use With: 50420
Designed In: Millimeters

Electrical

Voltage: 30V
Current: 6.0A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 9.8N (2.2 lb)
Contact Retention to Housing: 80.0N min. (with 51117)
Wire Pull-Out Force: 88.2N min. (AVS 0.5)
Mating Force: 142N max.
Unmating Force: 88.0N max.
Durability: 200 cycles

Physical

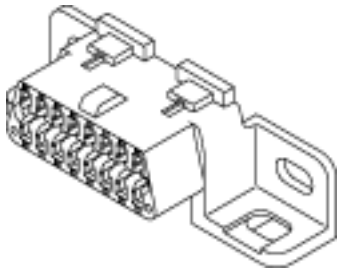
Housing: Polyester, UL 94V-0
TPA: Polyester
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=51115

4.00mm (.157") Pitch OBD-II Wire-to-Wire Housing

51116

Female, Screw Mount Type



Circuits	Order No.
16	51115-1601
	51115-1611

Features and Benefits

- Size 16 circuits only
- SAE J1962 standard for no board diagnostic
- Screw mount type

Reference Information

Product Specification: PS-50420-0800
Packaging: Bag
Mates With: 51117 TPA
Use With: 50420
Designed In: Millimeters

Electrical

Voltage: 30V
Current: 6.0A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Insertion Force: 9.8N (2.2 lb)
Contact Retention to Housing: 80.0N min. (with 51117)
Wire Pull-Out Force: 88.2N min. (AVS 0.5)
Mating Force: 142N max.
Unmating Force: 88.0N max.
Durability: 200 cycles

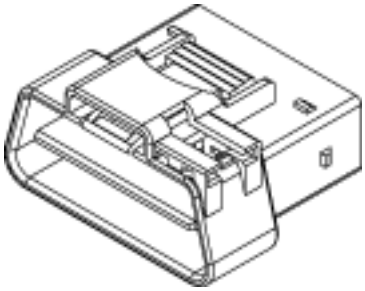
Physical

Housing: Polyester, UL 94V-0
TPA: Polyester
Operating Temperature: -40 to +85˚C

4.00mm (.157") Pitch OBD-II Wire-to-Wire Housing

68503

Male



Circuits	Order No.	Lead-free
16	68503-1602	Yes

Features and Benefits

- Size 16 circuits only
- SAE J1962 standard for no board diagnostic

Reference Information

Product Specification: PS-50420-0800
Mates With: 68503-0101 (wire dress cover), 68503-0103 (CPA)
Use With: 57964-9702
Designed In: Millimeters

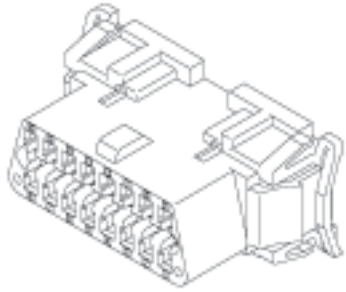
Physical

Housing: Polyester
Wire Dress Cover: Polyester
CPA: Polyamide
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=68503

4.00mm (.157") Pitch OBD-II Wire-to-Wire Receptacle Housing

51115



Circuits	Order No.	Lead-free
16	51115-1601	Yes

Features and Benefits

- Size 16 circuit
- Panel mount type

Reference Information

Product Specification: PS-51115
Packaging: Bag
Mates With: 51117 retainer
Use With: 50420 terminal and 51117 retainer
Designed In: Millimeters

Electrical

Voltage: 30V
Current: 4.0A
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical

Contact Retention to Housing: 9.0kg min. (with 51117)
Wire Pull-Out Force: 9.0kg min. (AVS 0.5)
Mating Force: 11.23kg max./14.49kg max. (with spring)
Unmating Force: 8.97kg max.
Durability: 200 cycles

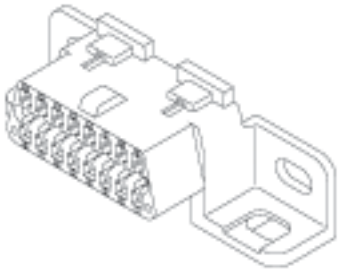
Physical

Housing: Black PBTP, UL 94V-0
Operating Temperature: -40 to +85˚C

www.molex.com/customer.html?seriesNumber=51115

4.00mm (.157") Pitch OBD-II Wire-to-Wire Receptacle Housing

51116



Features and Benefits
- Size 16 circuit
- Flange type

Reference Information
Product Specification: PS-51116
Packaging: Bag
Use With: 50420 terminal and 51118 retainer
Designed In: Millimeters

Electrical
Voltage: 30V
Current: 4.0A
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing: 9.0kg min. (with 51118)
Wire Pull-Out Force: 9.0kg min. (AVS 0.5)
Mating Force: 11.23kg max./14.49kg max. (with spring)
Unmating Force: 8.97kg max.
Durability: 200 cycles

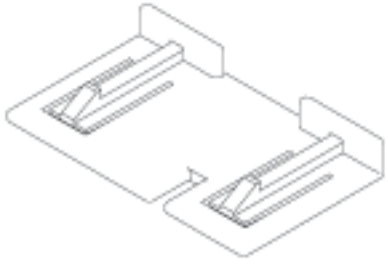
Physical
Housing: Black PBTP, UL 94V-0
Operating Temperature: -40 to +85˚C

Circuits	Order No.	Lead-free
16	51116-1601	Yes

www.molex.com/customer.html?seriesNumber=51116

4.00mm (.157") Pitch OBD-II Wire-to-Wire Retainer

51117/51118



Features and Benefits
- Terminal positioning assurance

Reference Information
Packaging: Bag
Designed In: Millimeters

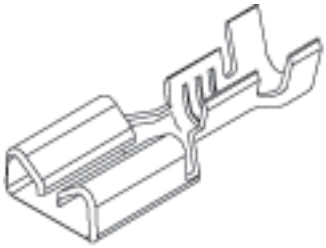
Electrical
Voltage: 30V
Current: 4.0A
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Physical
Housing: Gray PBTP, UL 94V-0
Operating Temperature: -40 to +85˚C

Circuits	Order No.	Use With	Lead-free
16	51117-1605	51115 housing	Yes
	51118-1605	51116 housing	

6.00mm (.236") Tab Wire-to-Wire Terminal

35427
Female
One-Piece Type



Features and Benefits
- Low mating force for easy insertion/extraction
- Used with TPA for secure terminal retention

Reference Information
Product Specification: PS-35270-001
Packaging: Reel
Mates With: 35725
Use With: 35270
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 20.0A max.
Contact Resistance: 3 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing: 98.1N (22.0 lb) min.
Wire Pull-Out Force: 343.2N (77.2 lb) min.

Physical
Contact: Brass
Plating: See Table
Operating Temperature: -40 to +85˚C

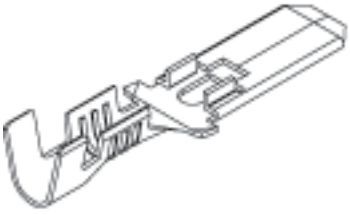
Order No.	Wire Range	Lead-free
35427-970X	AVS (CAVS) 0.30 to 0.50 (.012- .020) mm^2	Yes
35427-980X	AVS (CAVS) 0.85 to 1.25 (.033- .049) mm^2	
35427-990X	AVS (CAVS) 2.00 to 3.00 (.079- .118) mm^2	

Note: Replace X with
0 = Unplated
2 = Pre-Tin plated

www.molex.com/customer.html?seriesNumber=35427

6.00mm (.236") Tab Wire-to-Wire Terminal

35725
Male



Features and Benefits
- Slip-On terminal locks into housing lance
- Wide tab area for stable contact

Reference Information
Product Specification: PS-35270-001
Packaging: Reel
Mates With: 35427 and 35430
Use With: 35272
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 20.0A max.
Contact Resistance: 3 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing: 98.1N (22.0 lb) min.
Wire Pull-out Force: 343.2N (77.2 lb) min.

Physical
Contact: Brass
Plating: See Table
Wire Range: 12 to 22 AWG
Operating Temperature: -40 to +85˚C

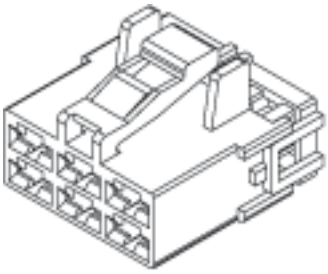
Order No.	Wire Range	Lead-free
35725-30X0	20-22 AWG	Yes
35725-18X0	14-18 AWG	
35725-19X0	12-14 AWG	

Note: Replace X with
0 = Unplated
1 = Post-tin plated

www.molex.com/customer.html?seriesNumber=35725

6.00mm (.236") Tab Wire-to-Wire Receptacle

35270
Secondary Lock



Circuits	Order No.
1	35270-0111
2	35270-0210
3	35270-0310
4	35270-0410
6	35270-0610

Features and Benefits
- Sizes 1 to 6 circuits
- Pre-loaded TPA for secure terminal retention
- Low mating force
- Guide wall protects locking feature

Reference Information
Product Specification: PS-35270-001
Packaging: Bag
Mates With: 35272
Use With: 35427 and 35430
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 20.0A max.
Contact Resistance: 3 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

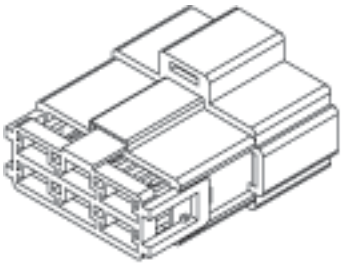
Mechanical
Contact Retention to Housing: 98.1N (22.0 lb) min.
Mating Force: 90.2N (20.3 lb) max.
Unmating Force: 90.2N (20.3 lb) max.

Physical
Housing: Polyester, UL 94-HB
Operating Temperature: -40 to +80˚C

www.molex.com/customer.html?seriesNumber=35270

6.00mm (.236") Tab Wire-to-Wire Plug

35272
Secondary Lock



Circuits	Order No.
1	35272-0120
2	35272-0210
3	35272-0310
4	35272-0410
6	35272-0610

Features and Benefits
- Sizes 1 to 6 circuits
- Pre-loaded TPA for secure terminal retention
- Low mating force
- Clip mounting feature fastens mated harness securely to vehicle

Reference Information
Product Specification: PS-35270-001
Packaging: Bag
Mates With: 35270
Use With: 35725
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 20.0A max.
Contact Resistance: 3 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Retention to Housing: 98.1N (22.0 lb) min.
Mating Force: 90.2N (20.3 lb) max.
Unmating Force: 90.2N (20.3 lb) max.

Physical
Housing: Polyester, UL 94-HB
Operating Temperature: -40 to +80˚C

Bulb Socket Sealed Terminal

35464
Positive Lock

Order No.	Wire Range (mm²)	Lead-free
35464-8000	AVS (AVSS) 0.3-0.85	Yes

Features and Benefits
- Positive locking terminal
- Available for sealed or unsealed systems

Reference Information
Product Specification: PS-35842-001
Packaging: Reel
Use With: 35842 and 35843
Designed In: Millimeters

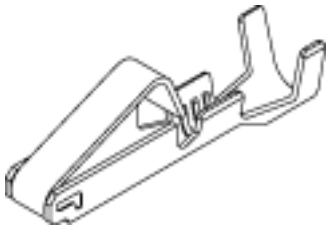
Electrical
Voltage: 14V
Current: 7.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Physical
Contact: Phosphor Bronze
Plating: Contact Area—Unplated
Insulation Diameter: 1.90mm (.075") max.
Strip Length: 2.60 to 3.60mm (.102 to .142")
Operating Temperature: -40 to +105°C

www.molex.com/customer.html?seriesNumber=35464

Bulb Socket Sealed Terminal

35465
Earth



Order No.	Wire Range (mm²)	Lead-free
35465-8000	AVS (AVSS) 0.3-0.85	Yes

Features and Benefits
- Positive locking terminal
- Available for sealed or unsealed systems

Reference Information
Product Specification: PS-35842-001
Packaging: Reel
Use With: 35842 and 35843
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 7.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Physical
Contact: Phosphor Bronze
Plating: Contact Area—Unplated
Insulation Diameter: 1.90mm (.075") max.
Strip Length: 2.60 to 3.60mm (.102 to .142")
Operating Temperature: -40 to +105°C

www.molex.com/customer.html?seriesNumber=35465

Bulb Socket

35843
Sealed, Single

Features and Benefits
- Used with: 21/5W for double bulb 21W for single bulb
- High temperature material
- Compact size provides space saving
- Easy insertion "push-to-seat" terminal design provides cost savings
- Bottom flange enables easy assembly with lamp
- Simplified lamp design by standardization of light center length
- Silicone wire seal provides good sealing

Reference Information
Product Specification: PS-35842-001
Packaging: Bag
Mates With: Lamp
Use With: 35464 and 35465
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 7.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention Force: 8.0 kgf min.
Wire Pull-Out Force: 58.3N (13.23 lb) min.
Durability: 50 cycles

Physical
Housing: High-temperature Polyamide, UL 94V-2
Operating Temperature: -40 to +105˚C

Order No.	Type
35843-1205	A type
35843-1215	B type
35843-1225	C type
35843-1245	D type
35843-1235	EC type

www.molex.com/customer.html?seriesNumber=35843

Bulb Socket

35842
Sealed, Double

Features and Benefits
- Used with: 21/5W for double bulb 21W for single bulb
- High temperature material
- Compact size provides space saving
- Easy insertion "push-to-seat" terminal design provides cost savings
- Bottom flange enables easy assembly with lamp
- Simplified lamp design by standardization of light center length
- Silicone wire seal provides good sealing

Reference Information
Product Specification: PS-35842-001
Packaging: Bag
Mates With: Lamp
Use With: 35464 and 35465
Designed In: Millimeters

Electrical
Voltage: 14V
Current: 7.0A max.
Contact Resistance: 10 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 100 Megohms min.

Mechanical
Contact Insertion Force: 1.5 kgf max.
Contact Retention Force: 8.0 kgf min.
Wire Pull-Out Force: 58.3N (13.23 lb) min.
Durability: 50 cycles

Physical
Housing: High-temperature Polyamide, UL 94V-2
Operating Temperature: -40 to +105˚C

Order No.	Type	Gasket (O-Ring)
35842-0305	A type	No
35842-1305		Yes
35842-0315	B type	No
35842-1315		Yes