# MULTILOCK Connector System .040 MULTILOCK Connectors

#### Introduction



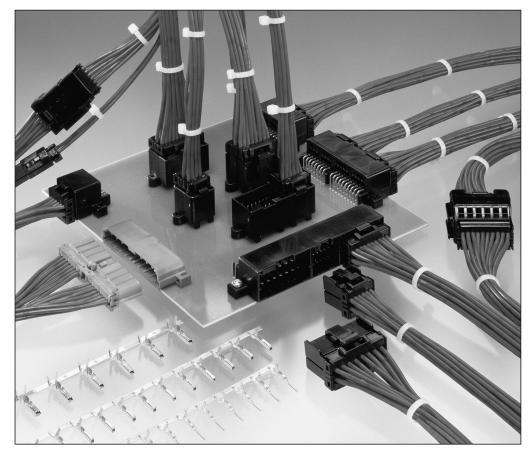








.040 MULTILOCK
Connectors are Wire-toWire and Wire-to-Board
Connectors widely
used for Automotive
Applications.



#### **Features**

- Contacts are spaced at 2.5 mm centerline.
- Connectors are easy to handle.
- Connectors are consisted of plug housings, receptacle contacts for wire termination, and cap housing assemblies for horizontal and vertical mountings on PC boards.
- The contacting point of a receptacle contact is designed to be protected.
- The plug housings are provided with double-lock mechanism integrated into the body which ensures complete contact insertions into housings.

■ The cap housing assemblies of 36, 48, 64 Positions of horizontal board mounting types are also available with hybrid styles to accept signal circuits with .040 series and power circuits with .070.

#### **Application Specifications:**

114-5108 (.040 Tab Contact) 114-5094 (.040 Rec. Contact) 114-5162 (.040 Rec. Contact) 114-5109 (.070 Rec. Contact) 114-5156 (.070 Rec. Contact)

#### **Product Specifications:**

108-5244 (Wire to Board) 108-5352 (Wire to Wire) 108-5471 (Wire to Wire, 14 Pos.)

#### Instruction Sheet:

411-5883

Available No. of Positions for

**Wire-to-Wire Applications:** 2, 4, 12, 14, 20

**Wire-to-Board Applications:** 8, 12, 14, 16, 20, 28, 36, 48, 64

Receptacle Contacts (for Plug Housing)

#### **Technical Features**

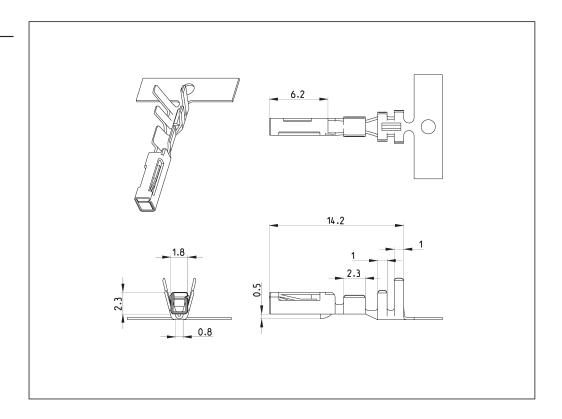
**Contact Material:**Copper Alloy

Contact Finishes: Pre-tin plated Selective gold plated

 ${\bf Application\ Specifications:}$ 

114-5094 114-5162

**Instruction Sheet:** 408-8547-1



Wire Siz	e Range	Wire Insulation		Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
		1116	Copper Alloy, pre-tinned	175180-1	-	
0005	22–20*	1.1–1.6	Copper Alloy, selective gold	175180-2	_	_
0.3-0.5	0.3–0.5 22–20*	1000	Copper Alloy, pre-tinned	173681-1	175062-1	04.577.4
		1.8–2.0	Copper Alloy, selective gold	173681-2	175062-2	91577-1

<sup>\*) 040</sup> Series for signal circuit. (Extraction Tool: Part No. 755430-1 (IS-288J)

Tab Contacts (for Cap Housing) Wire-to-Wire

#### **Technical Features**

**Contact Material:** 

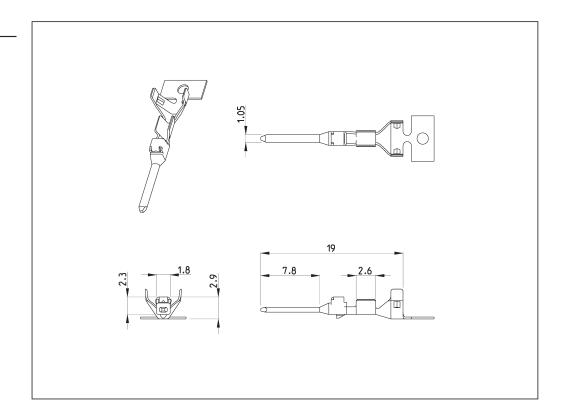
Brass

Contact Finishes:
Pre-tin plated
Selective gold plated

**Application Specification:** 

114-5108

**Instruction Sheet:** 408-8547-1



Wire Siz	e Range	Wire Insulation	Ph. L.	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
0.3-0.5	5 22–20 0.3–0.5		Pre-tin plated	173682-1	175063-1	91577-1
0.5-0.5	22-20	0.5-0.5	Selective gold plated	2098032-3	175063-1	910/7-1

 $\mbox{\bf Note:}\ \mbox{All Part Numbers are RoHS and ELV compliant.}$ 

.070 Receptacle Contacts (for 16 Position Plug, 174147-2)

#### **Technical Features**

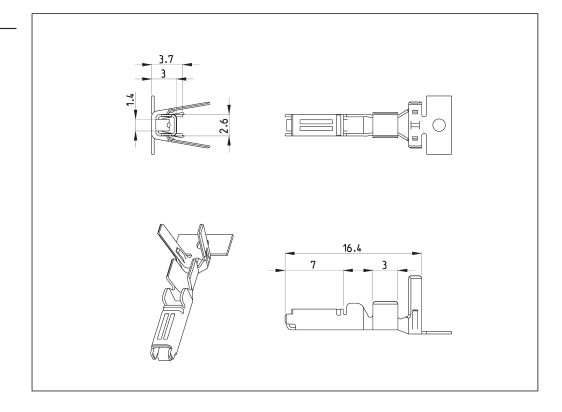
**Contact Material:**Copper Alloy

**Contact Finishes:**Pre-tin plated
Selective gold plated

**Application Specifications:** 

114-5109 114-5156

**Instruction Sheet:** 411-5422



Wire Size	e Range	Wire Insulation	Finish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
0.5.2.0	0.5–2.0 20–14	2.2–2.9	Copper Alloy, pre-tinned	173708-1	175081-1	911771-1
0.5–2.0		2.2-2.9	Copper Alloy, selective gold	173708-2	175081-2	911771-1
0.50–1.25	20–16	1.3–2.1	Copper Alloy, pre-tinned	175221-1	-	

 $\ensuremath{\text{Note:}}$  All Part Numbers are RoHS and ELV compliant.

#### **Technical Features**

No. of Positions:

2 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

 Housing Cap: PBT Plug: PBT

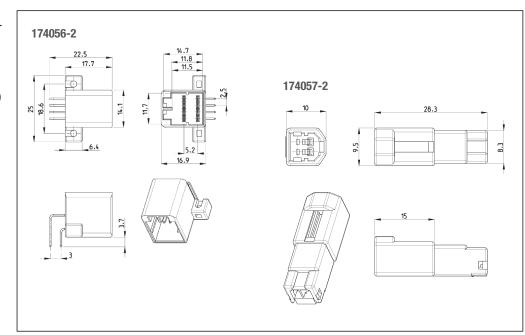
# **Product Specification:**

108-5352

#### **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts)

114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions:

4 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

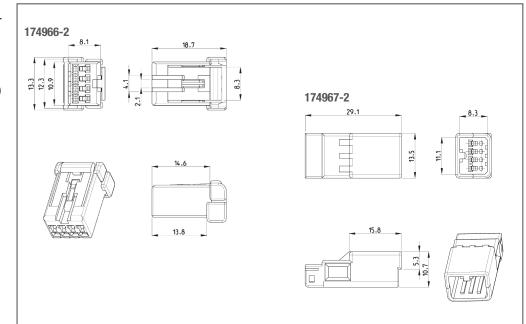
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5352

# ${\bf Application\ Specifications:}$

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
2	Wire	174056-2	174057-2			
4	Wire	174966-2	174967-2			

#### **Technical Features**

No. of Positions: 6 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

Housing Cap: PBT Plug: PBT

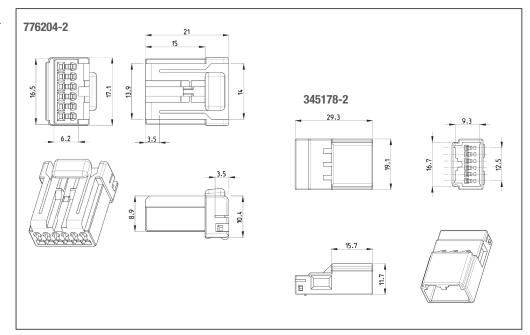
# **Product Specification:**

108-5352

#### **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts)

114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions: 12 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

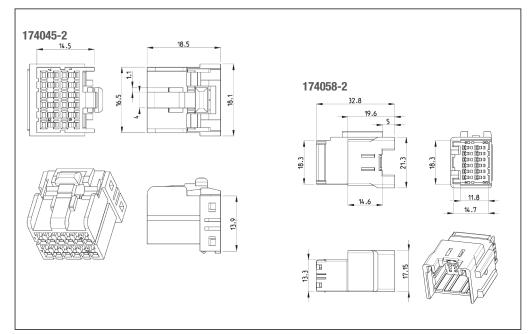
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5352

## **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
6	Wire	776204-2	345178-2			
12	Wire	174045-2	174058-2			

#### **Technical Features**

No. of Positions: 14 Positions

## Applicable Wires:

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

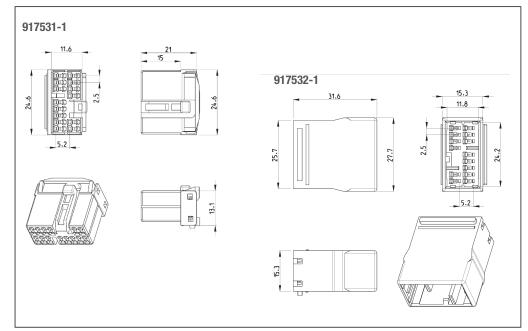
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5352

#### **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions: 16 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

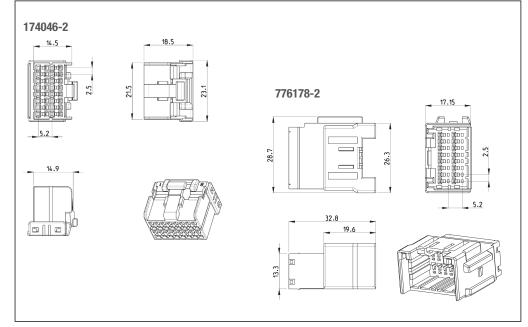
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5352

## **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
14	Wire	917531-1	917532-1			
16	Wire	174046-2	776178-2			

#### **Technical Features**

No. of Positions: 20 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

# Raw Material:

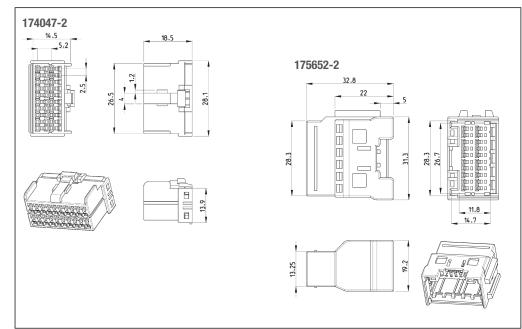
Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5352

#### **Application Specifications:**

114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
20	Wire	174047-2	175652-2			_

# MULTILOCK Connector System .040 MULTILOCK Connectors

Section Catalog 1654355-1 Issued 4-2010 Main Catalog 1654400-1 Chapter 5 – Issued 4-2010

# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 6 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

# Raw Material:

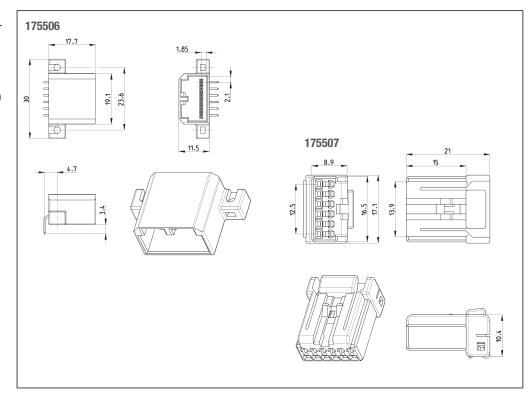
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
	6 Board			776203 (Board Lock)	175507 776204	
6				638102	638100	
				175506	175507	

#### **Technical Features**

No. of Positions: 8 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

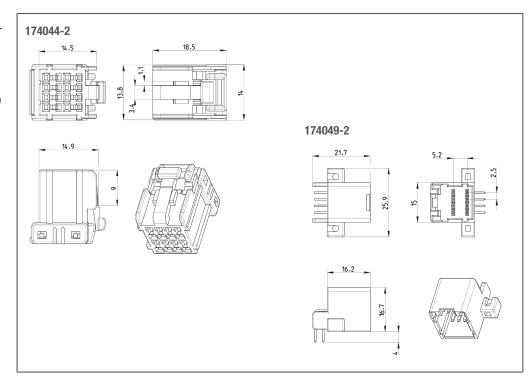
Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

## **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

#### No. of Positions:

12 Positions

# **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

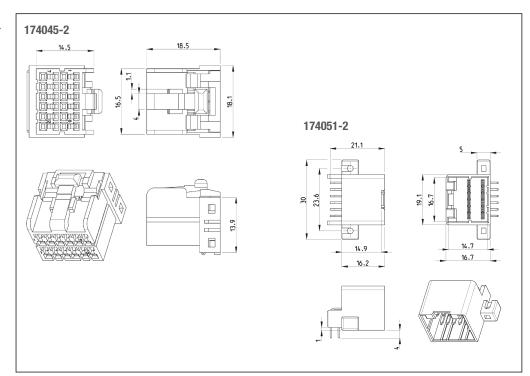
 Housing Cap: PBT Plug: PBT

#### **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
8	Board	174044-2	178455-1 (Panel Mount)	174049-2	174971-2	
12	Board	174045-2		174051-2	174973-2	

# MULTILOCK Connector System .040 MULTILOCK Connectors

Section Catalog 1654355-1 Issued 4-2010 Main Catalog 1654400-1 Chapter 5 - Issued 4-2010

# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 14 Positions

# **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

# Raw Material:

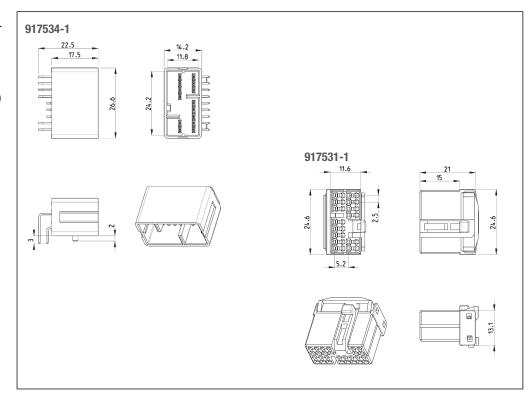
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
14	Board			917534-1 917604-1	917535-1 917603-1	917531-1

#### **Technical Features**

No. of Positions: 16 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

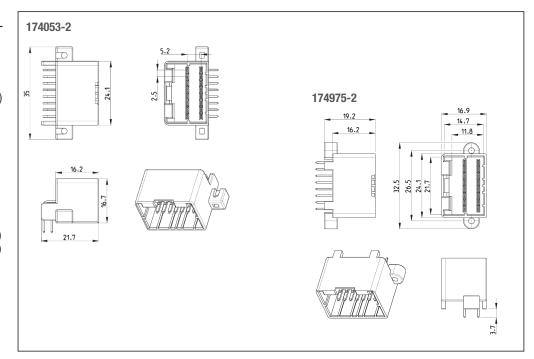
Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions:

20 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

# Raw Material:

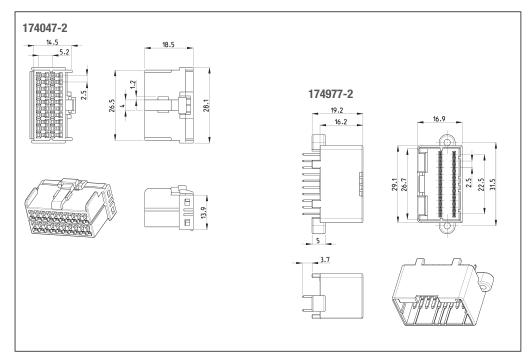
Housing Cap: PBT Plug: PBT

## **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Plug Assembly	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
16	Board	174046-2	174053-2	174975-2	
16	Board	174060-5 (single row)	174062-5 (single row)		
20	Board	174047-2	174055-2	174977-2	

#### **Technical Features**

No. of Positions: 28 Positions

#### **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

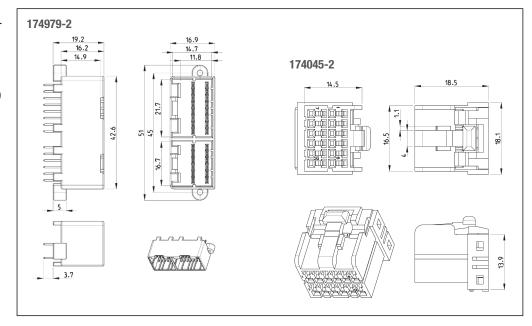
 Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

# **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions: 36 Positions

# Applicable Wires:

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

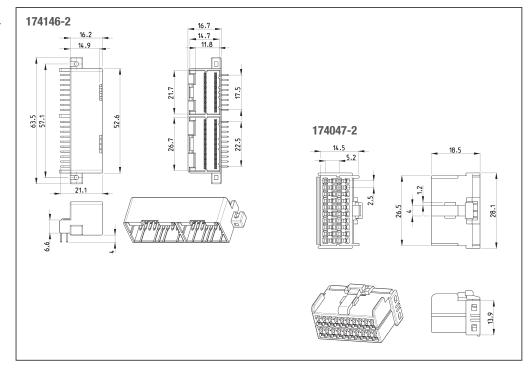
Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

# **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
28	Board		174979-2	12P: 174045-2 16P: 174046-2
36	Board	174146-2		20P: 174047-2 16P: 174046-2
36	Board	178460-1		20P: 174047-2 16P: 174147-2

#### **Technical Features**

No. of Positions: 48 Positions

## Applicable Wires:

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### **Raw Material:**

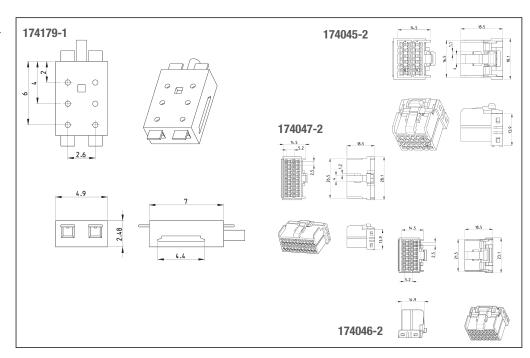
Housing Cap: PBT Plug: PBT

# **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions: 60 Positions

# **Applicable Wires:**

• .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

#### Raw Material:

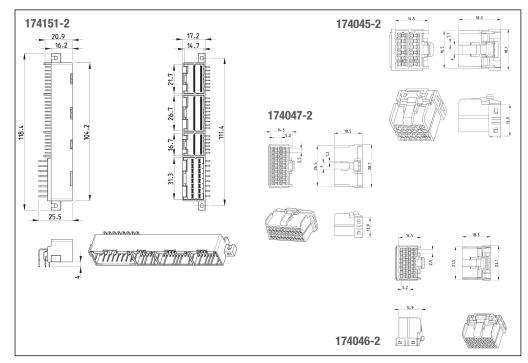
 Housing Cap: PBT Plug: PBT

#### **Product Specification:**

108-5244

#### **Application Specifications:**

114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
48	Board	174179-1		12P: 174045-2 16P: 174147-2 20P: 174047-2
64	Board	3-174151-2		12P: 174045-2 16P: 174147-2 20P: 174047-2 16P: 174046-2