# GENERAL PRODUCT INFORMATION



The PCIM Series encompasses all of the features of the PCIH Series in a smaller package. Reliability, high current capacity and many system management connections make the PCIM Series ideal for use in telecom, computer, information systems and industrial applications.

### **PCIM SERIES CONTACT VARIANTS**

FACE VIEW OF MALE AND REAR VIEW OF FEMALE





#### **PCIM30W15 VARIANT**

PCIM30W15R VARIANT (Inverted Termination)

15 Size 16 Power Contacts and 15 Size 22 Signal Contacts





#### **PCIM33W18 VARIANT**

PCIM33W18R VARIANT (Inverted Termination)

18 Size 16 Power Contacts and 15 Size 22 Signal Contacts

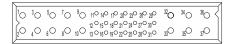




#### **PCIM34W13 VARIANT**

PCIM34W13R VARIANT (Inverted Termination)

13 Size 16 Power Contacts and 21 Size 22 Signal Contacts





#### **PCIM37W16 VARIANT**

PCIM37W16R VARIANT (Inverted Termination)

16 Size 16 Power Contacts and 21 Size 22 Signal Contacts



## TECHNICAL CHARACTERISTICS

Compact
Power
Connectors

**MATERIALS AND FINISHES:** 

Insulator: Glass-filled polyester, UL 94V-0,

blue color.

Contacts: Size 16 contacts: High

conductivity precision- machined copper alloy. Size 22 contacts: Precision-machined copper alloy.

Plating: Gold flash over nickel. Other

plating options available, refer to Step 7 on page 70.

Mounting Screws: Steel, zinc plated.

#### **ELECTRICAL CHARACTERISTICS:**

PCIM Contact Current Ratings, per UL 1977

See Temperature Rise Curves on page 5 for details.

PCIM30W15:

Size 16 Power Contacts:

Positions 28, 29, and 30: 45 amperes continuous,

all contacts under load.

Positions 1 through 12: 32 amperes continuous,

all contacts under load.

Size 22 Signal Contacts: 3 amperes nominal rating.

PCIM33W18:

Size 16 Power Contacts: 30 amperes continuous, all contacts under load.

Size 22 Signal Contacts: 3 amperes nominal rating.

PCIM34W13:

Size 16 Power Contacts:

Positions 1 through 10:

Positions 32, 33, and 34: 45 amperes continuous,

all contacts under load. 32 amperes continuous,

all contacts under load.

3 amperes nominal rating.

Size 22 Signal Contacts: **PCIM37W16:** 

PCIIVI37 W 16:

Size 16 Power Contacts: 30 amperes continuous, all contacts under load.

Size 22 Signal Contacts: 3 amperes nominal rating.

**Initial Contact Resistance:** 

Size 16 Contact:

Size 22 Contact:

0.0007 ohms maximum.

0.005 ohms maximum.

Per IEC 512-2, Test 2b.

**Insulator Resistance:** 5 G ohms per IEC 512-2,

Test 3a.

**Voltage Proof:** 

PCIM30W15:

Contacts 28, 29, and 30: 3,000 V r.m.s.
Contacts 1 through 12: 1,500 V r.m.s.
Contacts 13 through 27: 1,000 V r.m.s.

PCIM33W18:

Contacts 1 through 12 and

28 through 33: 1,500 V r.m.s. Contacts 13 through 27: 1,000 V r.m.s.

PCIM34W13:

Contacts 32, 33, and 34: 3,000 V r.m.s. Contacts 1 through 10: 1,500 V r.m.s. Contacts 11 through 31: 1,000 V r.m.s.

PCIM37W16:

Contacts 1 through 10 and

32 through 37: 1,500 V r.m.s. Contacts 11 through 31: 1,000 V r.m.s.

Creepage and Clearance

Distance; minimum:

PCIM30W15:

Contact 30 to Contact 28: 3.2mm [0.126 inch]
Contact 29 to Contact 28: 3.2mm [0.126 inch]
Contact 30 to Signal Contacts: 6.4mm [0.252 inch]
Contact 29 to Signal Contacts: 6.4mm [0.252 inch]
Contact 30 to Contact 29: 2.5mm [0.098 inch]
Contact 28 to Signal Contacts: 2.0mm [0.079 inch]

PCIM33W18:

Contact 28 to Signal Contacts: 2.0mm [0.079 inch]

PCIM34W13:

Contact 34 to Contact 32: 3.2mm [0.126 inch]
Contact 33 to Contact 32: 3.2mm [0.126 inch]
Contact 34 to Signal Contacts: 6.4mm [0.252 inch]
Contact 33 to Signal Contacts: 6.4mm [0.252 inch]
Contact 34 to Contact 33: 2.5mm [0.098 inch]
Contact 32 to Signal Contacts: 2.0mm [0.079 inch]

PCIM37W16:

Contact 32 to Signal Contacts: 2.0mm [0.079 inch]

Working Voltage:

PCIM30W15:

Contacts 28 through 30: 1,000 V r.m.s.
Contacts 1 through 12: 500 V r.m.s.
Contacts 13 through 27: 333 V r.m.s.

PCIM33W18:

Contacts 1 through 12 and

28 through 33: 500 V r.m.s. Contacts 13 through 27: 333 V r.m.s.

PCIM34W13:

Contacts 32 through 34: 1,000 V r.m.s.
Contacts 1 through 10: 500 V r.m.s.
Contacts 11 through 31: 333 V r.m.s.

PCIM37W16:

Contacts 1 through 12 and

32 through 37: 500 V r.m.s. Contacts 13 through 31: 333 V r.m.s.

**MECHANICAL CHARACTERISTICS:** 

Blind Mating System:

Male and female connector bodies provide "lead-in" for 1.3mm [0.050 inch] diametral

misalignment.

Polarization: Provided by connector body

design.

Removable Contacts: Install contact from rear of

insulator; release from front of insulator. Size 16 and 22 female contacts feature "Closed Entry" design for highest reliability.

**Removable Contact Retention** 

in Connector Body:

 Size 16 Contacts:
 67 N [15 lbs.]

 Size 22 Contacts:
 27 N [6 lbs.]

Fixed Contacts: Printed board terminations,

both straight and right angle (90°). Size 16 female contacts feature "Closed Entry" design. Size 22 feature rugged "Open Entry" contact design. "Closed Entry" contacts available, consult

Technical Sales.

# Compact Power Connectors

# TECHNICAL CHARACTERISTICS



Fixed Contact Retention in Connector Body:

 Size 16 Contacts:
 45 N [10 lbs.]

 Size 22 Contacts:
 27 N [6 lbs.]

Resistance to Solder Heat: 260°C [500°F] for 10 seconds

duration per IEC 512-6, Test 12e,

25-watt soldering iron.

**Sequential Contact Mating System:** 

PCIM30W15:
First mate contact 28 and last mate contact position 13.
PCIM33W18:
Last mate contact position 13.
PCIM34W13:
First mate contact 32 and last

mate contact position 17.
Last mate contact position 17.

PCIM37W16: Last mate contact position 1 Consult Technical Sales for customer specified sequential mating.

Safety "Recessed in

Insulator" Contacts: The following size 16 contacts

are recessed 5mm [0.197 inch] below the face of the female connector insulator per safety

requirements.

PCIM30W15: Contact positions 29 and 30.

PCIM33W18: None

PCIM34W13: Contact positions 33 and 34.

PCIM37W16: None

Compliant Terminations: Size 16 and 22 contacts are

available with Compliant Contact Terminations. Average insertion and extraction forces of size 16 contacts are 22N (5 lbs.) per

contact.

Printed Board Mounting: Mounting holes provided in

connector body for printed board mounting. Self-tapping screws

are available.

**Mechanical Operations:** 250 couplings, minimum.

**CLIMATIC CHARACTERISTICS:** 

Working Temperature: -55°C to +125°C.

U.L. Recognized File #E49351





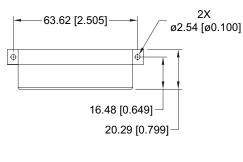
# CONNECTOR OUTLINE AND MATING DIMENSIONS

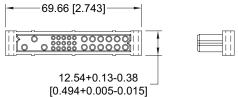
Compact
Power
Connectors

### PCIM CONNECTOR OUTLINE DIMENSIONS

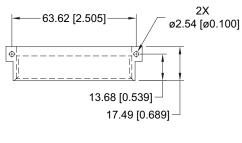
### RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR

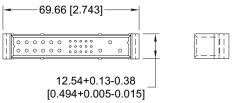
#### **FEMALE CONNECTOR**





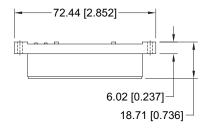
#### MALE CONNECTOR

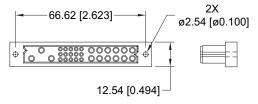




#### STRAIGHT BOARD MOUNT CONNECTOR

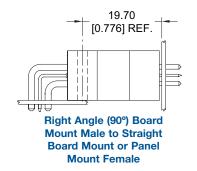
#### **FEMALE CONNECTOR**

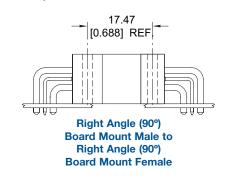




### PCIM CONNECTOR MATING DIMENSIONS

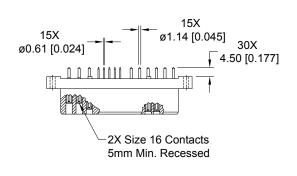
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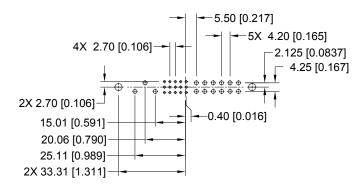




### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIM30W15F300A1





#### **CONTACT HOLE PATTERN**



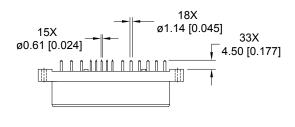


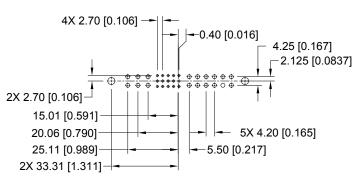
**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIM33W18F300A1









**CONTACT HOLE PATTERN** 

#### **CONNECTOR DIMENSIONS**



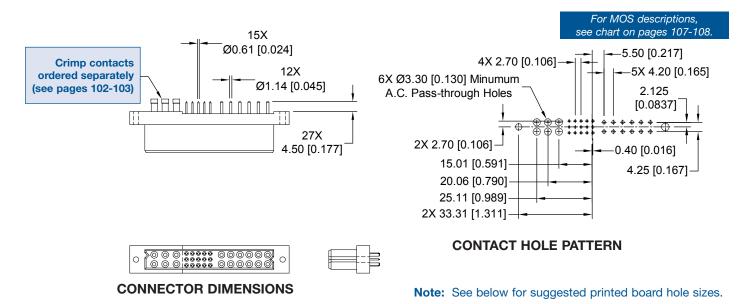
# STRAIGHT SOLDER CONNECTOR, FEMALE

Compact
Power
Connectors

### FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS\* -246.10

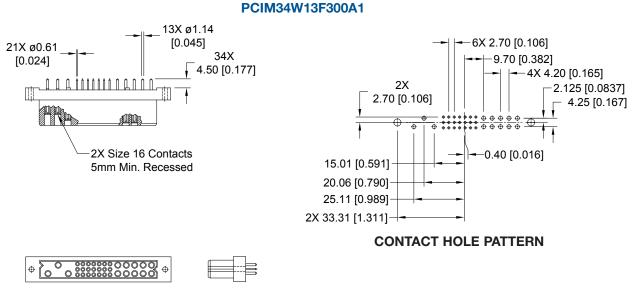
CRIMP CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

### LOW PROFILE PART NUMBER PCIM33W18F300A1-246.10



### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER



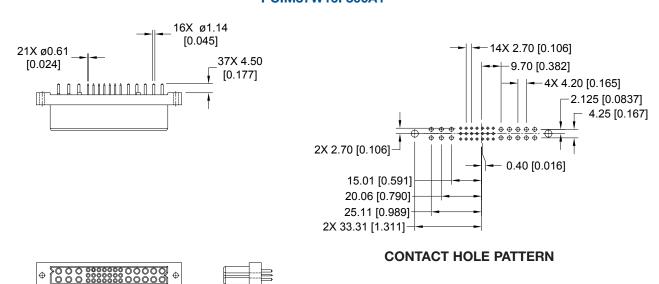
### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.00[0.039] holes for size 22 contact holes. Suggest Ø1.60 [0.063] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

CONNECTOR DIMENSIONS

### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIM37W16F300A1



#### **CONNECTOR DIMENSIONS**

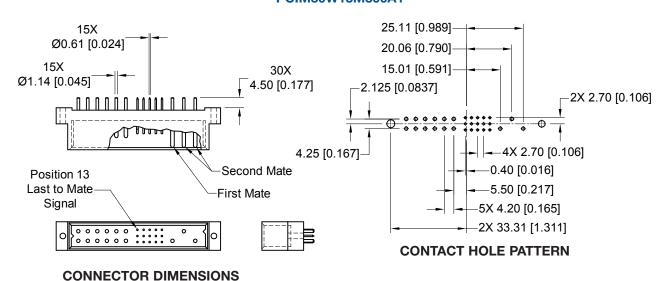
### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.00[0.039] holes for size 22 contact holes. Suggest Ø1.60 [0.063] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

# STRAIGHT SOLDER CONNECTOR, MALE

### MALE STRAIGHT SOLDER CONNECTOR CODE 3

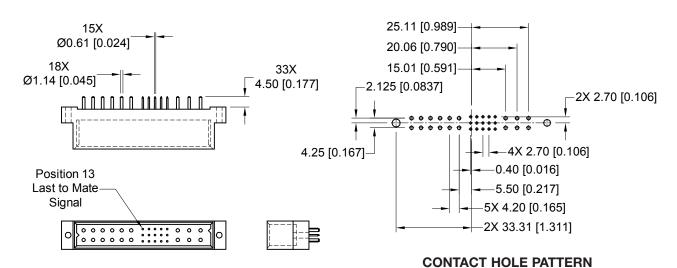
### STANDARD PART NUMBER PCIM30W15M300A1



Note: See below for suggested printed board hole sizes.

### MALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIM33W18M300A1



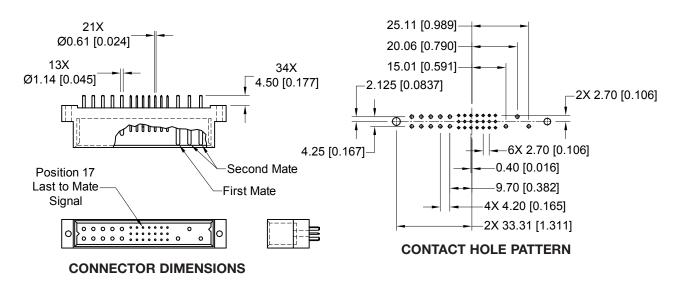
### **CONNECTOR DIMENSIONS**

#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.00 [0.039] holes for size 22 contact holes. Suggest Ø1.60 [0.063] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

### MALE STRAIGHT SOLDER CONNECTOR CODE 3

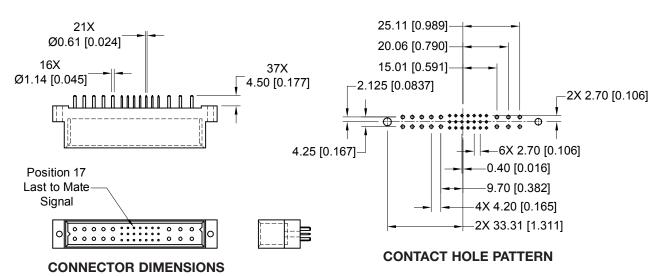
### STANDARD PART NUMBER PCIM34W13M300A1



Note: See below for suggested printed board hole sizes.

### MALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIM37W16M300A1

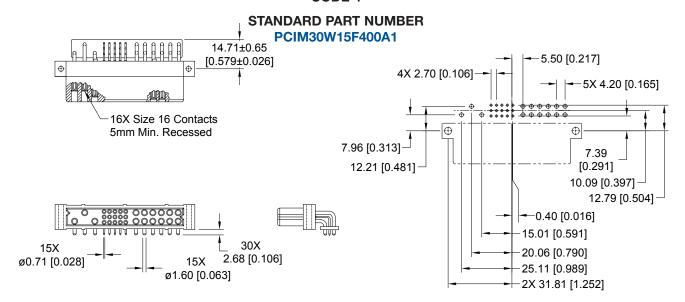




# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, FEMALE

Compact
Power
Connectors

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4



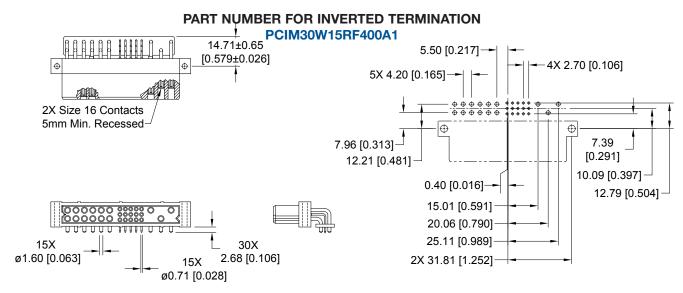
#### **CONNECTOR DIMENSIONS**

#### **CONTACT HOLE PATTERN**

**Note:** See below for suggested printed board hole sizes. **INVERTED PA** 

DOIN400\A/4.EE+

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4



#### **CONNECTOR DIMENSIONS**

#### **CONTACT HOLE PATTERN**

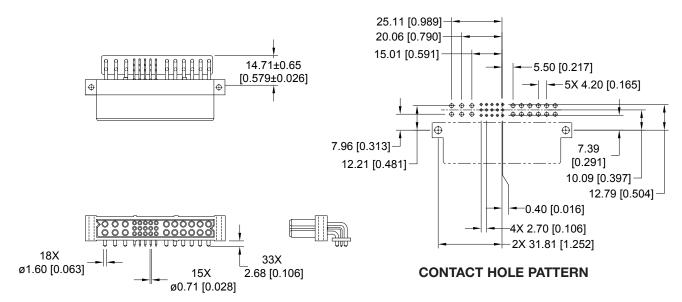
#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.14 [0.045] holes for size 22 contact holes. Suggest Ø2.03 [0.080] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.



### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTORS CODE 4

### STANDARD PART NUMBER PCIM33W18F400A1

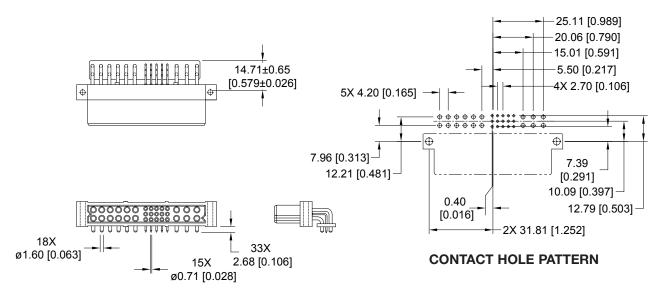


CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTORS CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM33W18RF400A1



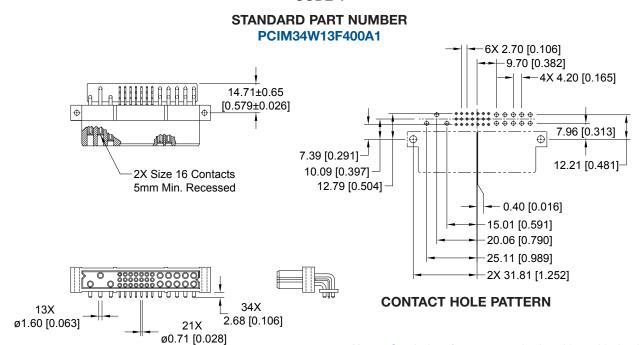
### **CONNECTOR DIMENSIONS**



# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, FEMALE

Compact
Power
Connectors

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

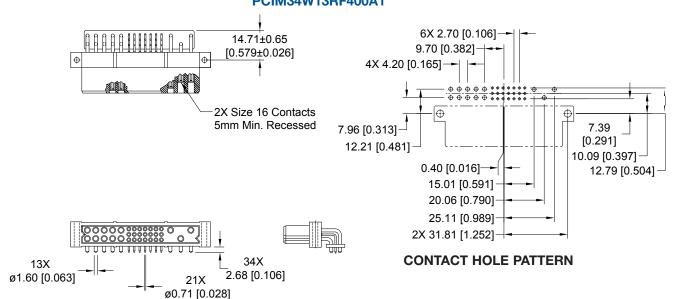


CONNECTOR DIMENSIONS

**Note:** See below for suggested printed board hole sizes.

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM34W13RF400A1



#### **CONNECTOR DIMENSIONS**

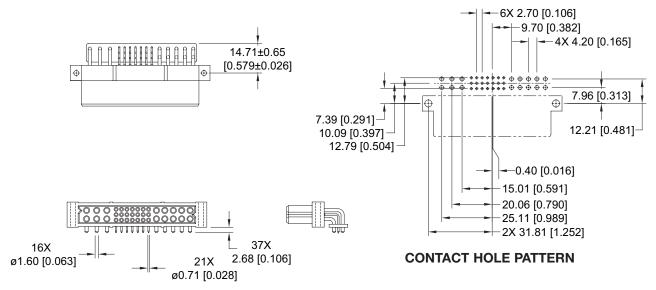
#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.14 [0.045] holes for size 22 contact holes. Suggest Ø2.03 [0.080] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.



### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### STANDARD PART NUMBER PCIM37W16F400A1

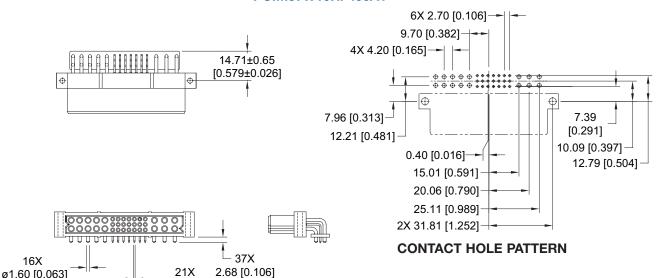


**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM37W16RF400A1



### **CONNECTOR DIMENSIONS**

#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

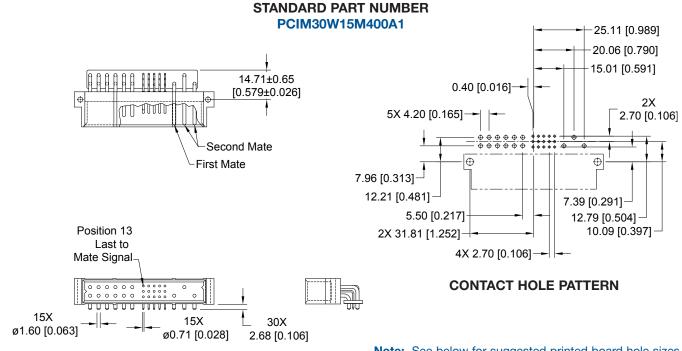
ø0.71 [0.028]



# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, MALE

Compact
Power
Connectors

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

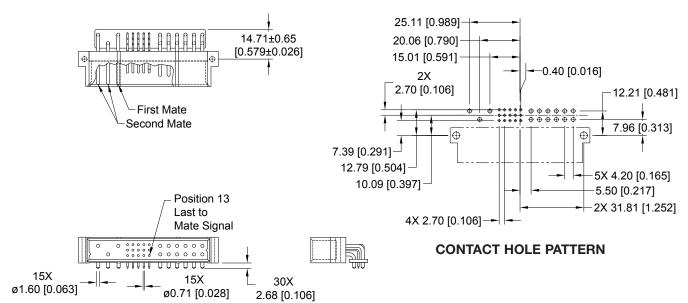


**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM30W15RM400A1



#### **CONNECTOR DIMENSIONS**

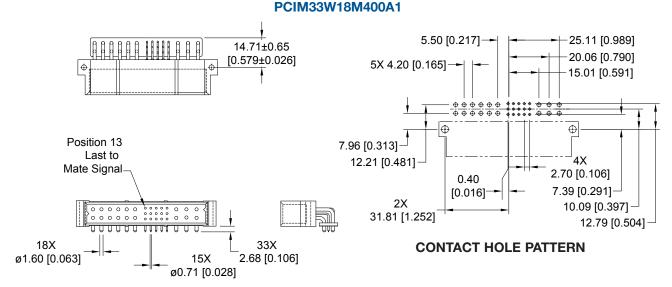
#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø1.14 [0.045] holes for size 22 contact holes. Suggest Ø2.03 [0.080] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.



### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### STANDARD PART NUMBER:

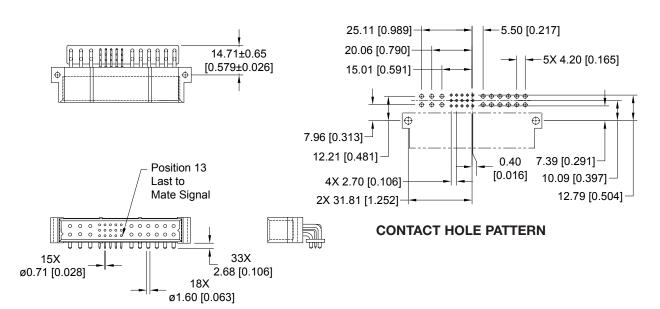


**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM33W18RM400A1



#### **CONNECTOR DIMENSIONS**

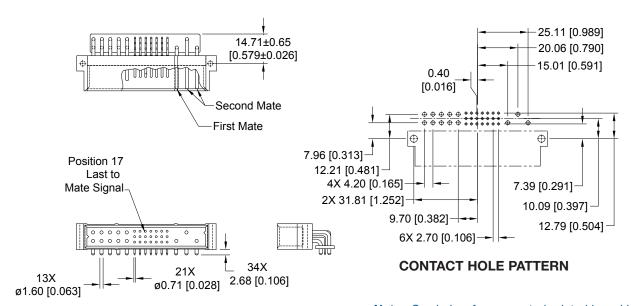


# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, MALE

Compact
Power
Connectors

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### STANDARD PART NUMBER: PCIM34W13M400A1



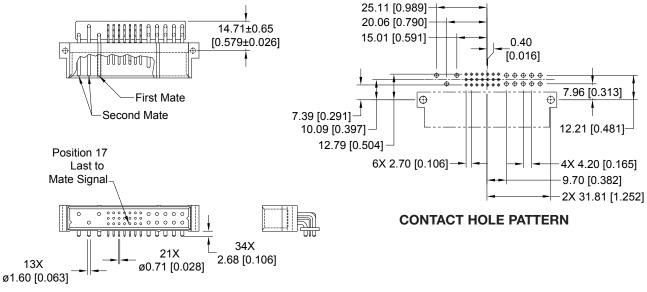
**CONNECTOR DIMENSIONS** 

**Note:** See below for suggested printed board hole sizes.

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION:

#### PCIM34W13RM400A1

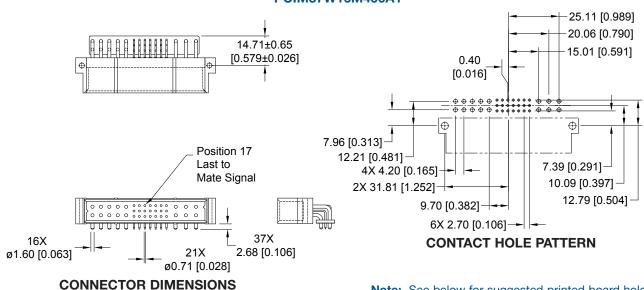


#### **CONNECTOR DIMENSIONS**



### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

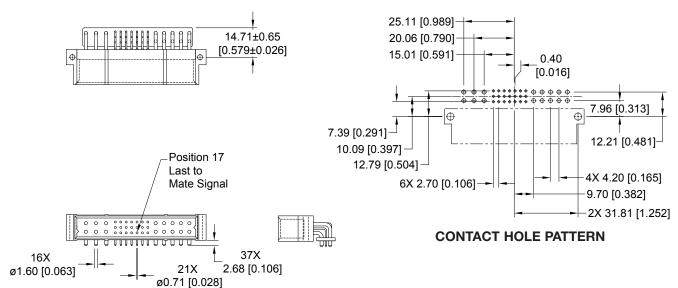
### STANDARD PART NUMBER PCIM37W16M400A1



**Note:** See below for suggested printed board hole sizes.

### MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

### PART NUMBER FOR INVERTED TERMINATION PCIM37W16RM400A1



#### **CONNECTOR DIMENSIONS**

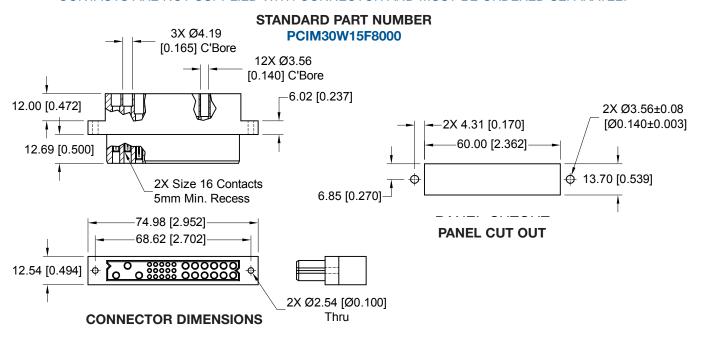


# PANEL MOUNT CONNECTOR, FEMALE

Compact
Power
Connectors

### FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

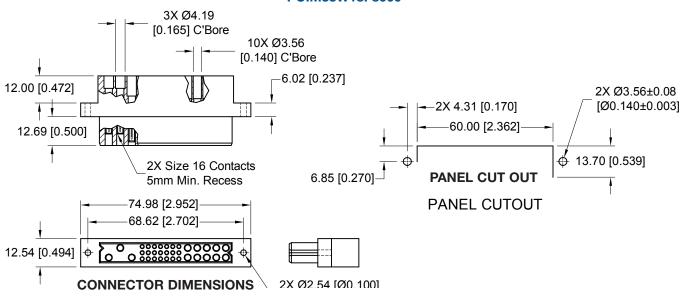
CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY



### FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

### STANDARD PART NUMBER PCIM33W18F8000



For information regarding removable contacts, see Removable Contact section, pages 102-103.

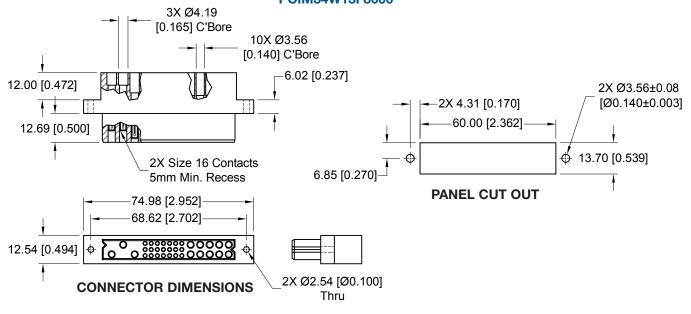
# PANEL MOUNT CONNECTOR, FEMALE



### FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

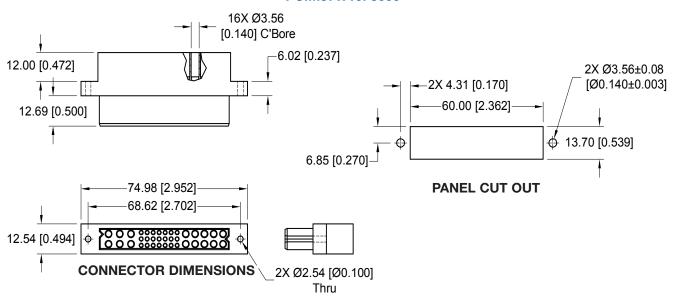
### STANDARD PART NUMBER PCIM34W13F8000



### FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

### STANDARD PART NUMBER PCIM37W16F8000



For information regarding removable contacts, see Removable Contact section, pages 102-103.



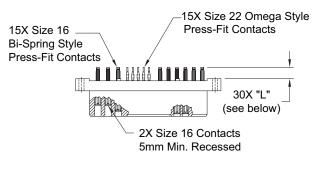
### **COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE**

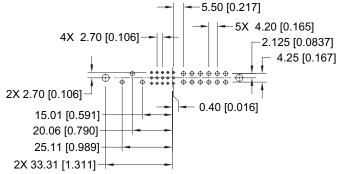
Compact Power **C**onnectors

#### FEMALE COMPLIANT PRESS-FIT CONNECTOR **CODE 93 OR 94**

### STANDARD PART NUMBER PCIM30W15F9300A1 PCIM30W15F9400A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.







**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes, press-fit connector installation tools, and mounting screw options.

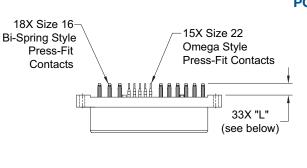
#### **CONTACT HOLE PATTERN**

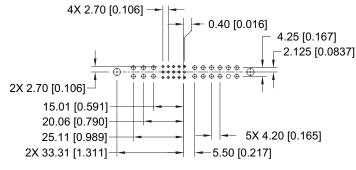
CONTACT TAIL LENGTH					
Code	"L" Length	Board Thickness			
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]			
94	7.04 [0.277]	4.45 min. [0.175 min.]			

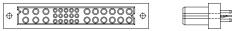
### FEMALE COMPLIANT PRESS-FIT CONNECTOR **CODE 93 OR 94**

### STANDARD PART NUMBER PCIM33W18F9300A1 PCIM33W18F9400A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.







**CONTACT HOLE PATTERN** 

#### CONNECTOR DIMENSIONS

### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

NOTE: See page 105 for suggested printed board drill hole sizes, recommended plating and finished hole sizes for compliant contact termination positions.

For press-fit connector installation tools, see pages 105-106.

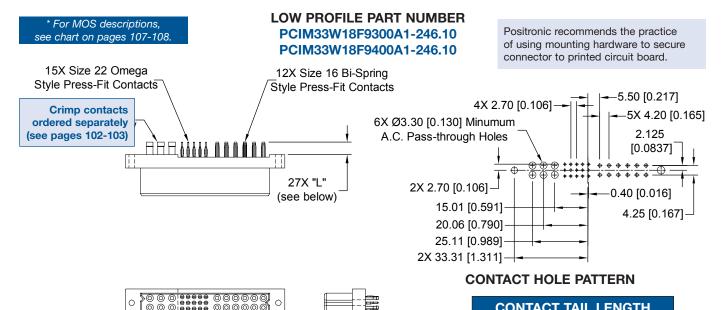
For mounting screw options, see page 105.

CONTACT TAIL LENGTH						
Code	"L" Length	Board Thickness				
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]				
94	7.04 [0.277]	4.45 min. [0.175 min.]				



### FEMALE COMPLIANT PRESS-FIT CONNECTOR WITH A.C. PASS-THROUGH CODE 93 OR 94 WITH MOS\* -246.10

CRIMP CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY



#### CONNECTOR DIMENSIONS

**Note:** See below for suggested printed board hole sizes, press-fit connector installation tools, and mounting screw options.

# CONTACT TAIL LENGTH Code "L" Length Board Thickness 93 5.72 [0.225] 2.29 to 4.45 [0.090 to 0.175] 94 7.04 [0.277] 4.45 min. [0.175 min.]

Positronic recommends the practice of using mounting hardware to secure

connector to printed circuit board.

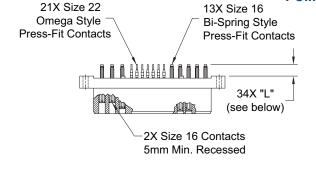
#### FEMALE COMPLIANT PRESS-FIT CONNECTOR

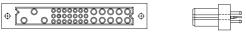
**CODE 93 OR 94** 

### STANDARD PART NUMBER

PCIM34W13F9300A1 PCIM34W13F9400A1

> 25.11 [0.989] 2X 33.31 [1.311]





#### **CONNECTOR DIMENSIONS**

#### SUGGESTED PRINTED BOARD HOLE SIZES:

Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

NOTE: See page 105 for suggested printed board drill hole sizes, recommended

plating and finished hole sizes for compliant contact termination positions.

For press-fit connector installation tools, see pages 105-106.

For mounting screw options, see page 105.

#### **CONTACT HOLE PATTERN**

# CONTACT TAIL LENGTH Code "L" Length Board Thickness 93 5.72 [0.225] 2.29 to 4.45 [0.090 to 0.175] 94 7.04 [0.277] 4.45 min. [0.175 min.]



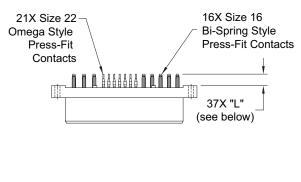
# COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE

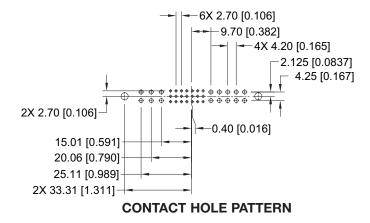
Compact
Power
Connectors

### FEMALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94

STANDARD PART NUMBER PCIM37W16F9300A1 PCIM37W16F9400A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.







#### **CONNECTOR DIMENSIONS**

CONTACT TAIL LENGTH						
Code	"L" Length	<b>Board Thickness</b>				
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]				
94	7.04 [0.277]	4.45 min. [0.175 min.]				

#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

**NOTE:** See page 105 for suggested printed board drill hole sizes, recommended plating and finished hole sizes for compliant contact termination positions.

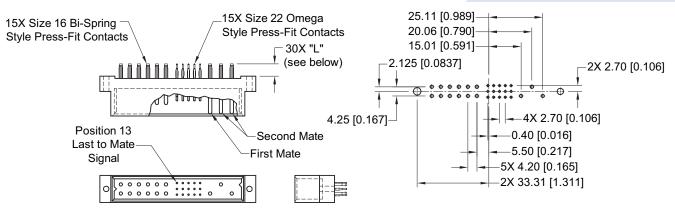
For press-fit connector installation tools, see pages 105-106.

For mounting screw options, see page 105.

### MALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94

### STANDARD PART NUMBER PCIM30W15M9300A1 PCIM30W15M9400A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.



#### CONNECTOR DIMENSIONS

#### CONTACT HOLE PATTERN

CO	CONTACT TAIL LENGTH			
Code	"L" Length	Board Thickness		
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]		
94	7.04 [0.277]	4.45 min. [0.175 min.]		

**Note:** See below for suggested printed board hole sizes, press-fit connector installation tools, and mounting screw options.

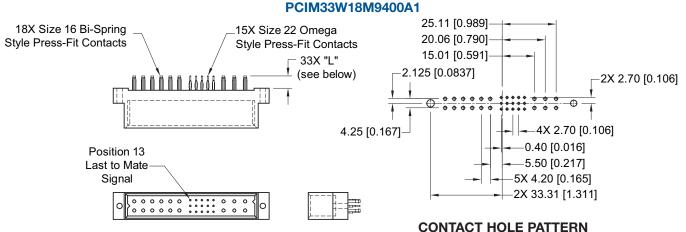


### MALE COMPLIANT PRESS-FIT CONNECTOR

**CODE 93 OR 94** 

### STANDARD PART NUMBER PCIM33W18M9300A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.



#### **CONNECTOR DIMENSIONS**

#### SUGGESTED PRINTED BOARD HOLE SIZES:

Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

**NOTE:** See page 105 for suggested printed board drill hole sizes, recommended plating and finished hole sizes for compliant contact termination positions.

For press-fit connector installation tools, see pages 105-106.

For mounting screw options, see page 105.

# CONTACT TAIL LENGTH Code "L" Length Board Thickness 93 5.72 [0.225] 2.29 to 4.45 [0.090 to 0.175] 94 7.04 [0.277] 4.45 min. [0.175 min.]



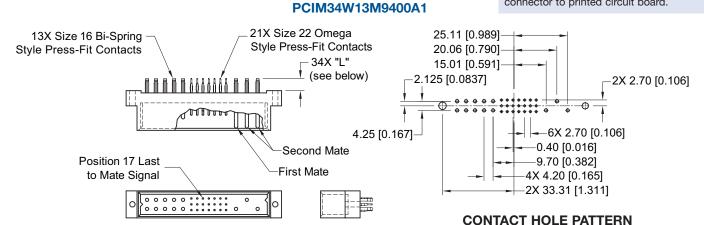
# COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, MALE

Compact
Power
Connectors

### MALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94

### STANDARD PART NUMBER PCIM34W13M9300A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.



#### **CONNECTOR DIMENSIONS**

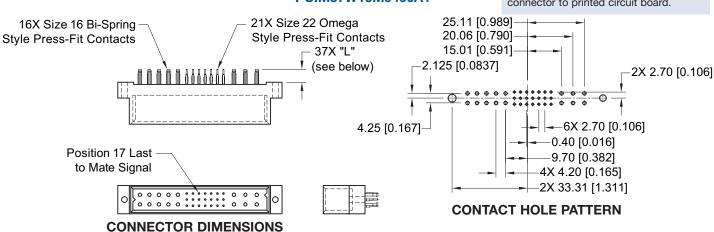
**Note:** See below for suggested printed board hole sizes, press-fit connector installation tools, and mounting screw options.

# CONTACT TAIL LENGTH Code "L" Length Board Thickness 93 5.72 [0.225] 2.29 to 4.45 [0.090 to 0.175] 94 7.04 [0.277] 4.45 min. [0.175 min.]

### MALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94

### STANDARD PART NUMBER PCIM37W16M9300A1 PCIM37W16M9400A1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.



CONTACT TAIL LENGTH					
Code	"L" Length	Board Thickness			
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]			
94	7.04 [0.277]	4.45 min. [0.175 min.]			

#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

**NOTE:** See page 105 for suggested printed board drill hole sizes, recommended plating and finished hole sizes for compliant contact termination positions.

For press-fit connector installation tools, see pages 105-106.

For mounting screw options, see page 105.



### ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 7

	STEP	1	2	3	4	5	6	7	8	9
EXAMPLE	EXAMPLE	PCIM	34W13	F	93	0	0	<b>A1</b>	/AA	

#### **STEP 1 - BASIC SERIES**

PCIM - PCIM Series

#### **STEP 2 - CONNECTOR VARIANTS**

30W15 - 15 size 16 contacts and 15 size 22 contacts

30W15R - 15 size 16 contacts and 15 size

22 contacts. Inverted termination style, use with contact type "4"

33W18 - 18 size 16 contacts and 15 size 22 contacts

33W18R - 18 size 16 contacts and 15 size 22 contacts. Inverted termination

style, use with contact type "4"

34W13 - 13 size 16 contacts and 21 size 22 contacts

34W13R - 13 size 16 contacts and 21 size 22 contacts. Inverted termination style, use with contact type "4"

37W16 - 16 size 16 contacts and 21 size 22 contacts

37W16R - 16 size 16 contacts and 21 size 22 contacts. Inverted termination style, use with contact type "4"

#### **STEP 3 - CONNECTOR GENDER**

F - Female M - Male

### **STEP 4 - CONTACT TERMINATION TYPE**

- 3 Solder, Straight Printed Board Mount with 4.50 [0.177] tail extension for connection system 1.
- Solder, Right Angle (90°) Printed Board Mount with 2.68
   [0.106] tail extension for connection systems 1 and 4.
- 8 Contacts must be ordered separately for Panel Mount Cable Connectors, connection system 3, see pages 102-103. Female connector only.
- 93 Press-Fit, Compliant Termination size 16 and size 22 Straight Printed Board Mount for use with board thicknesses of 2.29 to 4.45 [0.090 to 0.175]. Connection system 1.
- 94 Press-Fit, Compliant Termination size 16 and size 22 Straight Printed Board Mount for use with board thickness of 4.45 minimum [0.175 minimum]. Connection system 1.

**NOTE:** If you would like a 2D drawing or 3D model, once you've made your connector selection, please visit www.connectpositronic.com. If you can't find your specific part number on our web site, contact Technical Sales to have one created.





#### **STEP 9 - SPECIAL OPTIONS**

FOR LISTING OF SPECIAL OPTIONS, SEE SPECIAL OPTIONS APPENDIX ON PAGES 107-108.

### STEP 8 - ENVIRONMENTAL COMPLIANCE OPTIONS

/AA - Compliant per EU Directive 2002/95/EC (RoHS)

**NOTE:** If compliance to environmental legislation is not required, this step will not be used. Example: PCIM34W13F9300A1

### STEP 7 - CONTACT PLATING FOR PRINTED BOARD TYPE CONNECTORS

- 0 Crimp contacts ordered separately
- A1 Gold flash over nickel on mating end and termination end.
- A2 Gold flash over nickel on mating end and 5.00μ
   [0.00020 inch] tin-lead solder coat on termination end.
   Not available with code 93 or code 94 in step 4.
- C1  $0.76\mu$  [0.000030 inch] gold over nickel on mating end and termination end.
- C2 0.76μ [0.000030 inch] gold over nickel on mating end and 5.00μ [0.00020 inch] tin-lead solder coat on termination end. Not available with code 93 or code 94 in step 4.
- D1  $1.27\mu$  [0.000050 inch] gold over nickel on mating end and termination end.
- D2 11.27μ [0.000050 inch] gold over nickel on mating end and 5.00μ [0.00020 inch] tin-lead solder coat on termination end. Not available with code 93 or code 94 in step 4.

#### STEP 6 - HOODS

0 - Not applicable

#### **STEP 5 - MOUNTING STYLE**

0 - Standard Option

See page 105 for mounting screw options.