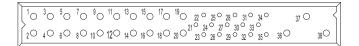
The **PCIH** series was developed specifically for use with **CompactPCI®** in-rack modular power supplies. The package size is ideal for use in all 3U and 6U based platforms. The PCIH series is an excellent choice in **IEEE 1101.1**, **IEEE 1101.10**, and **VITA 30** applications where system power requirements have exceeded the capabilities of commonly used power connectors.

The **PCIH47** variant is fully compliant to the **PICMG® 2.11 Power Interface Specification**. This Specification details standardized power for use with **CompactPCI®** systems. Visit www.picmg.com for details.

### **PCIH SERIES CONTACT VARIANTS**

FACE VIEW OF MALE AND REAR VIEW OF FEMALE





#### **PCIH38 VARIANT**

#### **PCIH38R VARIANT (Inverted Termination)**

23 Size 16 Power Contacts and 15 Size 20 Signal Contacts

### **CompactPCI®**



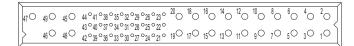


#### **PCIH47 VARIANT**

#### PCIH47R VARIANT (Inverted Termination)

23 Size 16 Power Contacts and 24 Size 22 Signal Contacts





#### **PCIH49W25 VARIANT**

#### PCIH49W25R VARIANT

25 Size 16 Power Contacts and 24 Size 22 Signal Contacts

Visit our website for the latest catalog updates and supplements at www.connectpositronic.com/pci/catalog



### **TECHNICAL CHARACTERISTICS**

Compact Power **C**onnectors

#### **MATERIALS AND FINISHES:**

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

blue color.

Contacts: Size 16 contacts: High

> conductivity precision-machined copper alloy. Size 20 and 22 contacts: Precision-machined

copper alloy.

Plating: Gold flash over nickel. Other

plating options available, refer to

5 amperes nominal rating.

3 amperes nominal rating.

37 amperes continuous, all contacts under load.

Step 7 on page 36.

**Mounting Screws:** Steel, zinc plated.

#### **ELECTRICAL CHARACTERISTICS:**

#### PCIH Contact Current Ratings, per UL 1977

See Temperature Rise Curves on page 4 for details.

#### PCIH38:

Size 16 Power Contacts:

Positions 36, 37, and 38: 40 amperes continuous,

all contacts under load. Positions 1 - 20: 28 amperes continuous, all contacts under load.

Size 20 Signal Contacts:

#### PCIH47:

Size 16 Power Contacts:

Positions 45, 46, and 47: 40 amperes continuous, all contacts under load.

Positions 1 - 20: 28 amperes continuous, all contacts under load.

Size 22 Signal Contacts:

#### PCIH49:

Size 16 Power Contacts:

Positions 45 through 49:

Positions 1 - 20: 28 amperes continuous, all contacts under load.

Size 22 Signal Contacts: 3 amperes nominal rating.

Initial Contact Resistance:

Size 16 Contact:

0.0007 ohms maximum. Size 20 Contact: 0.004 ohms maximum. Size 22 Contact: 0.005 ohms maximum. Per IEC 60512-2, Test 2b. Insulation Resistance: 5 G ohms per IEC 60512-2,

Test 3a.

#### Voltage Proof:

#### PCIH38:

Contacts 36, 37 and 38: 3,000 V r.m.s. Contacts 1 through 20: 1.500 V r.m.s. Contacts 21 through 35: 1,000 V r.m.s.

PCIH47:

Contacts 45, 46, and 47: 3,000 V r.m.s. Contacts 1 through 20: 1,500 V r.m.s. Contacts 21 through 44: 1,000 V r.m.s.

Contacts 1 through 20: 1,500 V r.m.s. Contacts 45 through 49: 1,500 V r.m.s. Contacts 21 through 44: 1.000 V r.m.s.

#### Creepage and Clearance Distance; minimum:

#### PCIH38:

Contact 38 to Contact 36: 3.2mm [0.126 inch] Contact 37 to Contact 36: 3.2mm [0.126 inch] Contact 38 to Signal Contacts: 6.4mm [0.252 inch] Contact 37 to Signal Contacts: 6.4mm [0.252 inch] Contact 38 to Contact 37: 2.5mm [0.098 inch] Contact 36 to Signal Contacts: 2.0mm [0.079 inch]

PCIH47:

Contact 47 to Contact 45: 3.2mm [0.126 inch] Contact 46 to Contact 45: 3.2mm [0.126 inch] Contact 47 to Signal Contacts: 6.4mm [0.252 inch] Contact 46 to Signal Contacts: 6.4mm [0.252 inch] Contact 47 to Contact 46: 2.5mm [0.098 inch] Contact 45 to Signal Contacts: 2.0mm [0.079 inch] Contact 36 to Signal Contacts: 2.0mm [0.079 inch]

#### Working Voltage:

#### PCIH38:

Contacts 36, 37 and 38: 1,000 V r.m.s. Contacts 1 through 20: 500 V r.m.s. Contacts 21 through 35: 333 V r.m.s.

PCIH47:

Contacts 45, 46, and 47: 1.000 V r.m.s. Contacts 1 through 20: 500 V r.m.s. Contacts 21 through 44: 333 V r.m.s.

PCIH49:

500 V r.m.s. Contacts 1 through 20: Contacts 45 through 49: 500 V r.m.s. Contacts 21 through 44: 333 V r.m.s.

#### **MECHANICAL CHARACTERISTICS:**

**Blind Mating System:** 

Male and female connector bodies provide "lead-in" for 1.3 mm [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, 20 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 20 Contacts: 45 N [10 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 20 and 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 20 and 22 Contacts: 27 N [6 lbs.]

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

duration per IEC 60512-6, Test 12e, 25-watt soldering iron.

**Sequential Contact Mating System:** 

PCIH38: First mate contact 36 and last

mate contact positions 22, 25

and 28.

PCIH47 and

PCIH49 with MOS: First mate contact 45 and last

mate contact position 27.

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.

PCIH38: Contact positions 37 and 38.

PCIH47 and

**PCIH49 with MOS:** Contact positions 46 and 47.

**Compliant Terminations:** Size 16, 20 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

and Panel Mounting: Mounting holes provided in

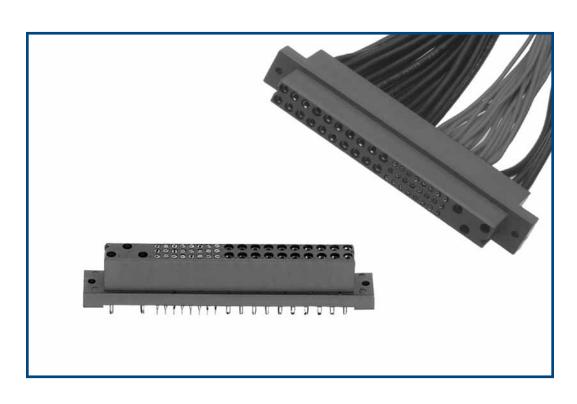
connector body for both printed board and panel mounting. Self-tapping screws are available.

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

**CLIMATIC CHARACTERISTICS:** 

**Working Temperature:**  $-55^{\circ}\text{C} \text{ to } +125^{\circ}\text{C}.$ 

UL Recognized File #E49351 CSA Recognized File #LR54219 TUV Recognized File #215/99





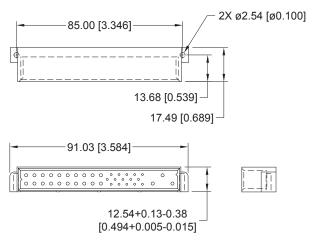
# CONNECTOR OUTLINE AND MATING DIMENSIONS

Compact
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Connectors

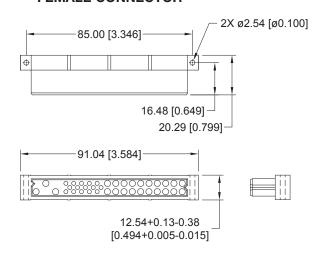
#### PCIH CONNECTOR OUTLINE DIMENSIONS

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

#### MALE CONNECTOR



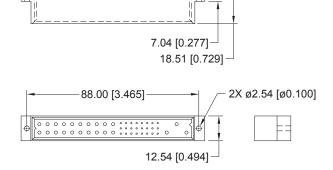
#### **FEMALE CONNECTOR**



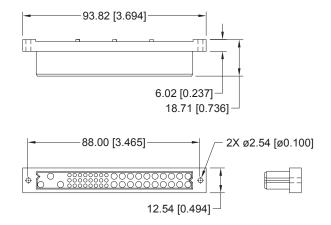
#### STRAIGHT BOARD MOUNT CONNECTOR

#### MALE CONNECTOR

93.82 [3.694]

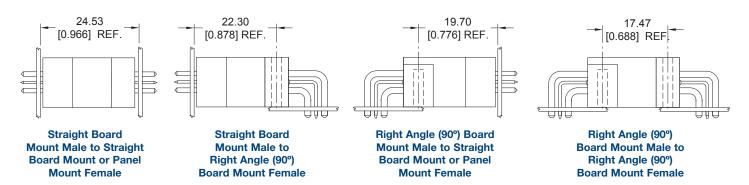


#### **FEMALE CONNECTOR**



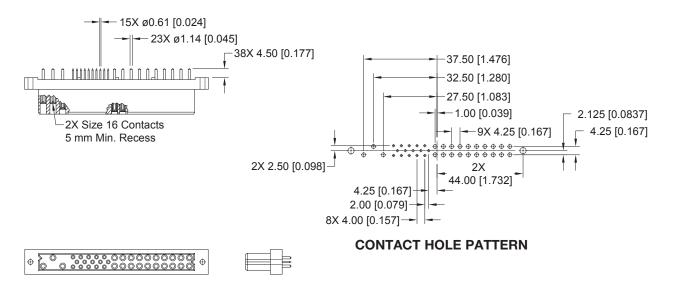
#### PCIH CONNECTOR MATING DIMENSIONS

(FULLY MATED)



### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIH38F300A1

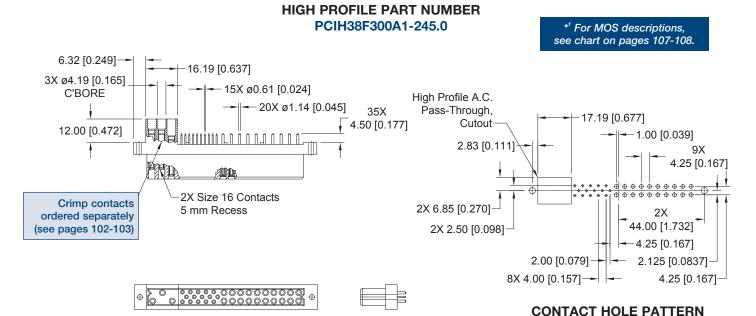


CONNECTOR DIMENSIONS

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

### FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS\*1 -245.0

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



#### **CONNECTOR DIMENSIONS**



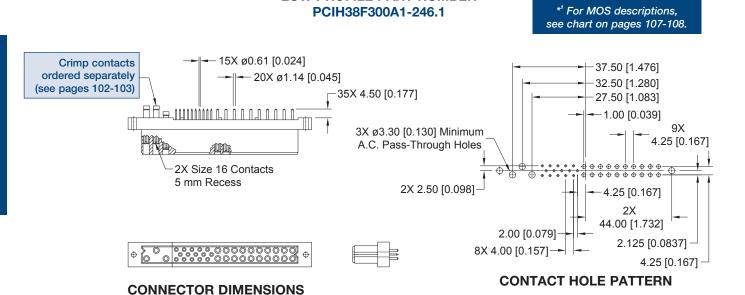
# STRAIGHT SOLDER CONNECTOR, FEMALE

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## FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS\*1 -246.1

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

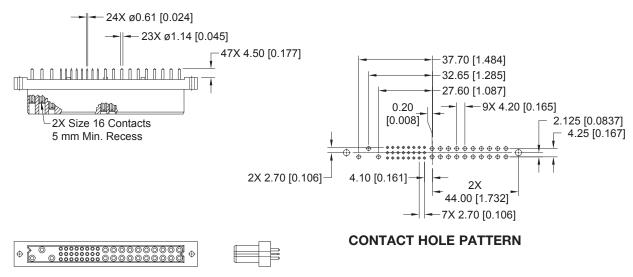
LOW PROFILE PART NUMBER



Note: See below for suggested printed board hole sizes.

## FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIH47F300A1



#### **CONNECTOR DIMENSIONS**

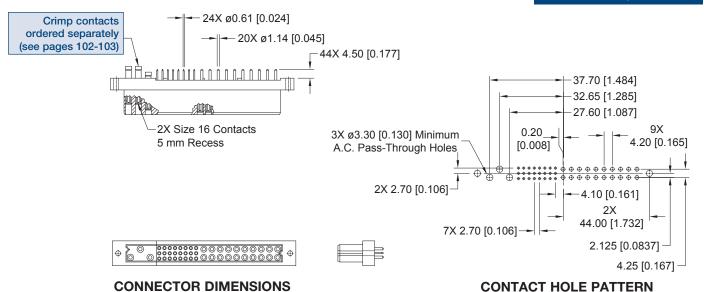
#### **SUGGESTED PRINTED BOARD HOLE SIZES:**

## FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS\*1 -246.0

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

#### LOW PROFILE PART NUMBER PCIH47F300A1-246.0

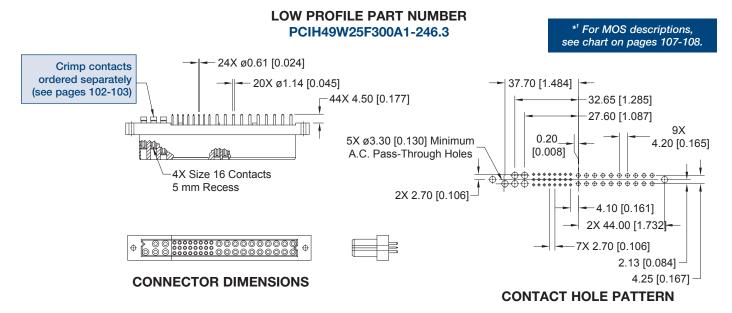
\*1 For MOS descriptions, see chart on pages 107-108.



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

### FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS\*1 -246.3

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



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



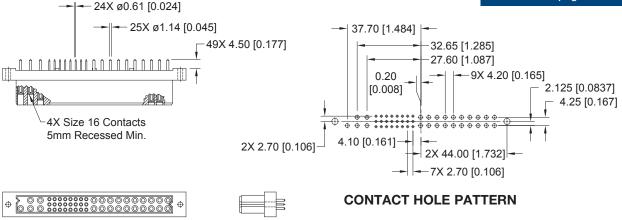
# STRAIGHT SOLDER CONNECTOR, FEMALE

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### FEMALE STRAIGHT SOLDER CONNECTOR CODE 3 WITH MOS\*1 -379.0

### STANDARD PART NUMBER PCIH49W25F300A1-379.0

\*1 For MOS descriptions, see chart on pages 107-108.



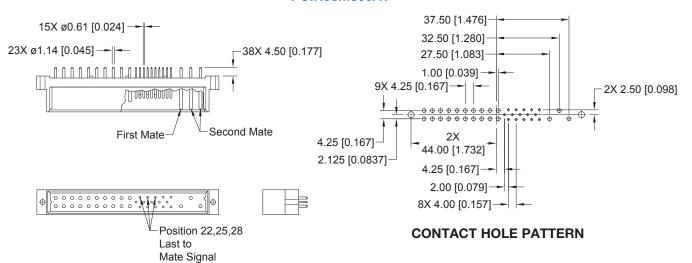
#### **CONNECTOR DIMENSIONS**

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



### MALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIH38M300A1

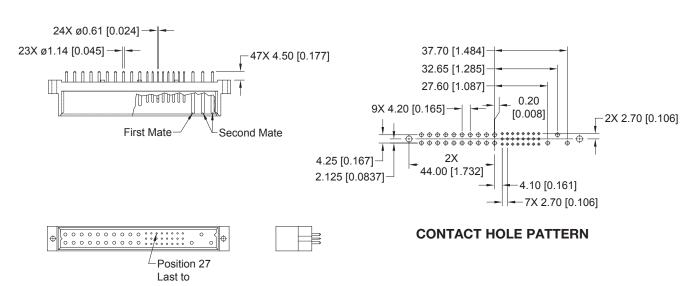


#### CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

### MALE STRAIGHT SOLDER CONNECTOR CODE 3

### STANDARD PART NUMBER PCIH47M300A1



#### **CONNECTOR DIMENSIONS**



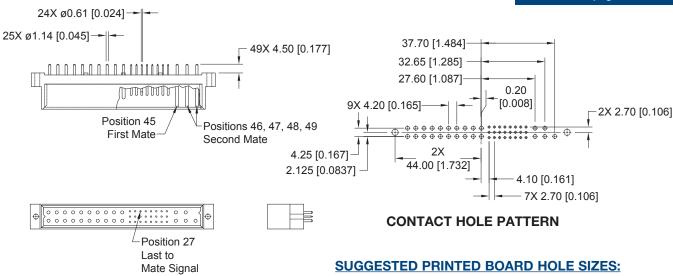
# STRAIGHT SOLDER CONNECTOR, MALE

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#### MALE STRAIGHT SOLDER CONNECTOR CODE 3 WITH MOS\*1 -378.0

### STANDARD PART NUMBER PCIH49W25M300A1-378.0

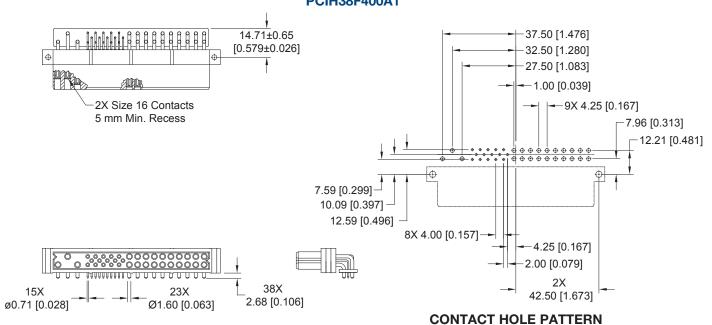
\*1 For MOS descriptions, see chart on pages 107-108.



**CONNECTOR DIMENSIONS** 

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

#### STANDARD PART NUMBER PCIH38F400A1



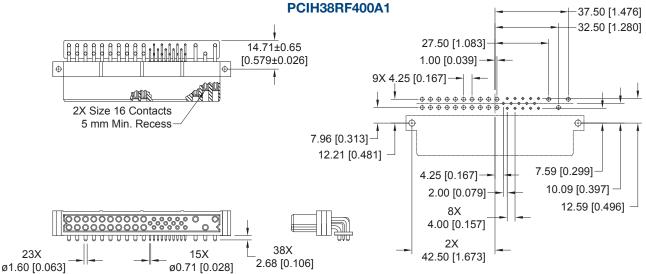
#### **CONNECTOR DIMENSIONS**

Note: See below for suggested printed board hole sizes.

**CONTACT HOLE PATTERN** 

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

### PART NUMBER FOR INVERTED TERMINATION



#### **CONNECTOR DIMENSIONS**

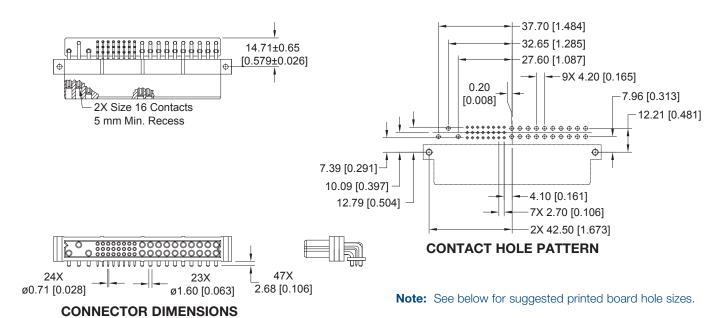


# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, FEMALE

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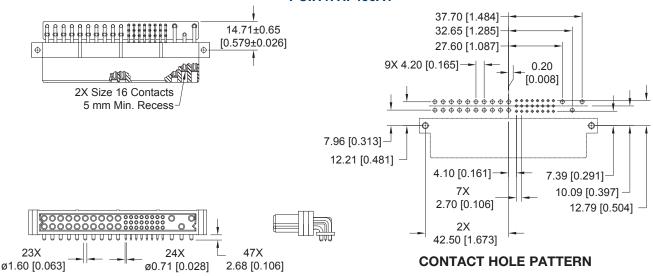
### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

#### STANDARD PART NUMBER PCIH47F400A1



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

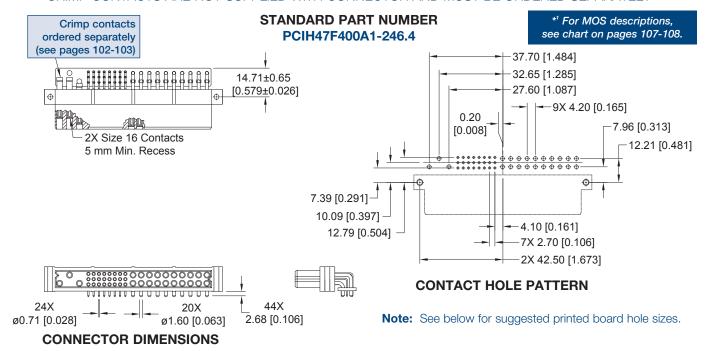
### PART NUMBER FOR INVERTED TERMINATION PCIH47RF400A1



#### **CONNECTOR DIMENSIONS**

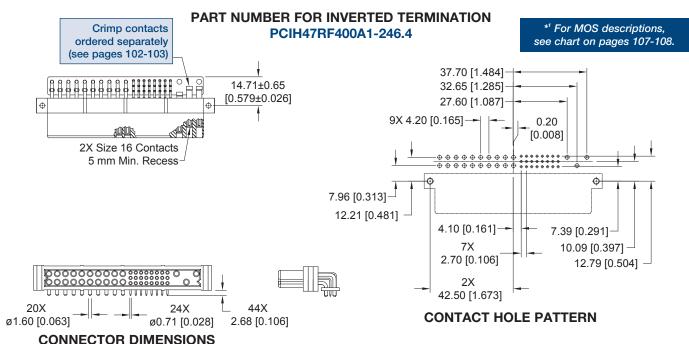
## FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR WITH A.C. PASS-THROUGH CODE 4 WITH MOS\*1 -246.4

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



## FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR WITH A.C. PASS-THROUGH CODE 4 WITH MOS\*1 -246.4

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





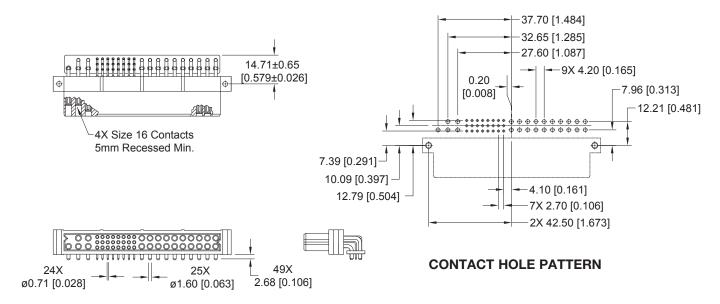
# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, FEMALE

Compact
Power
Connectors

### FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4 WITH MOS\*1 -379.0

#### STANDARD PART NUMBER PCIH49W25F400A1-379.0

\*1 For MOS descriptions, see chart on pages 107-108.



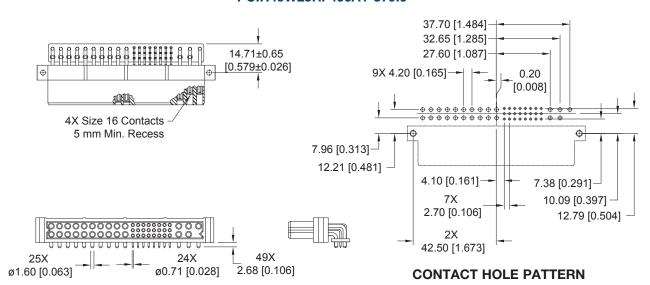
**CONNECTOR DIMENSIONS** 

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

## FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4 WITH MOS\*1 -379.0

### PART NUMBER FOR INVERTED TERMINATION PCIH49W25RF400A1-379.0

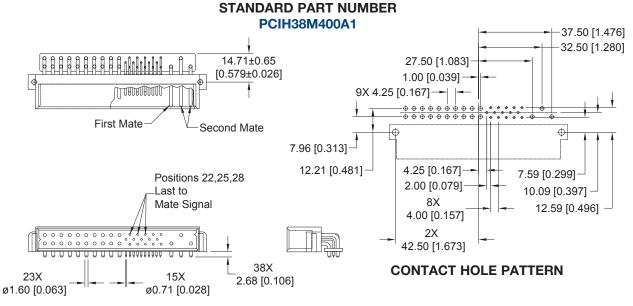
\*1 For MOS descriptions, see chart on pages 107-108.



#### **CONNECTOR DIMENSIONS**



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

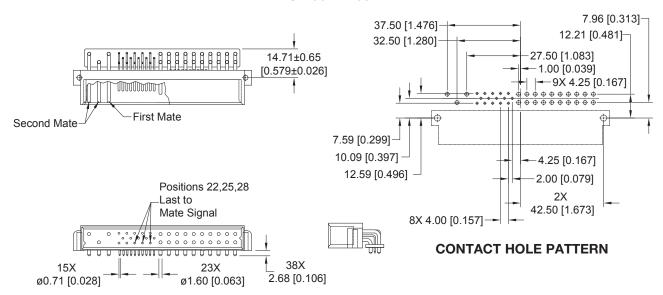


**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

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

### PART NUMBER FOR INVERTED TERMINATION PCIH38RM400A1



### CONNECTOR DIMENSIONS

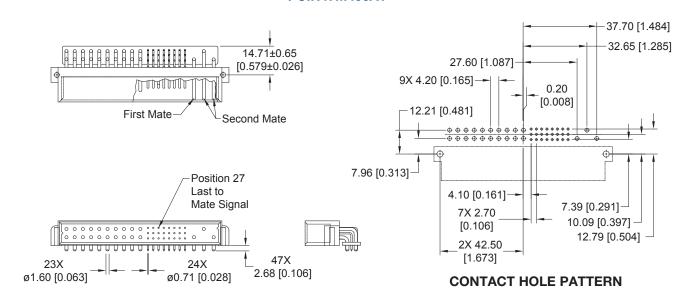


# RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, MALE

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

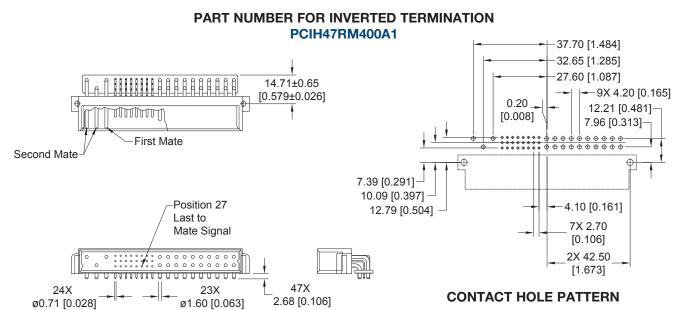
#### STANDARD PART NUMBER PCIH47M400A1



**CONNECTOR DIMENSIONS** 

Note: See below for suggested printed board hole sizes.

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

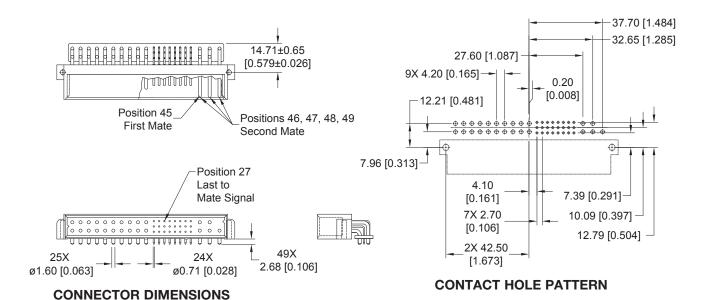


#### **CONNECTOR DIMENSIONS**

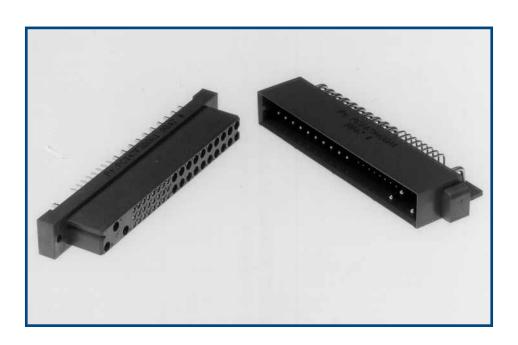
## MALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4 WITH MOS\*1 -378.0

STANDARD PART NUMBER PCIH49W25M400A1-378.0

\*1 For MOS descriptions, see chart on pages 107-108.



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





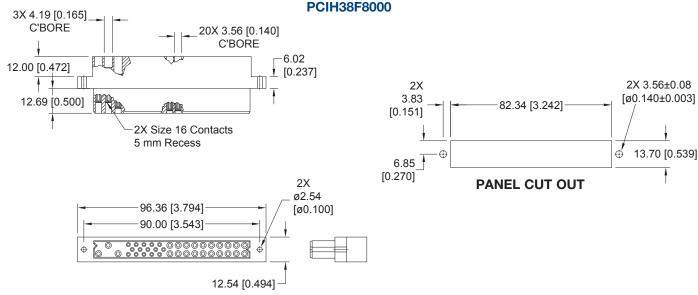
# PANEL MOUNT CONNECTORS, FEMALE

Compact
Power
Connectors

## FEMALE PANEL MOUNT CRIMP CONTACT CONNECTORS CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

### STANDARD PART NUMBER

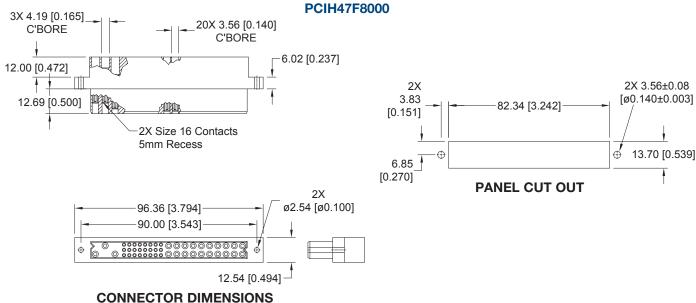


### CONNECTOR DIMENSIONS

### FEMALE PANEL MOUNT CRIMP CONTACT CONNECTORS CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

### STANDARD PART NUMBER



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

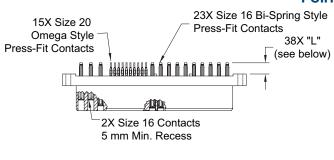
#### FEMALE COMPLIANT PRESS-FIT CONNECTOR **CODE 93 OR 94**



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

37.50 [1.476]

32.50 [1.280]





#### 27.50 [1.083] 1.00 [0.039] 9X 4.25 [0.167] 2X 2.50 [0.098] 2X 44.00 [1.732] 4.25 [0.167] 2.125 [0.0837] 2.00 [0.079] 4.25 [0.167] 8X 4.00 [0.157]-

**CONTACT HOLE PATTERN** 

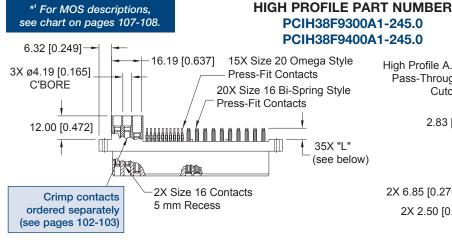
#### CONNECTOR DIMENSIONS

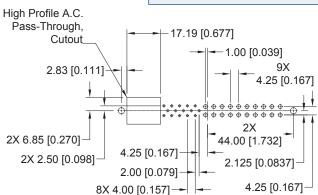
CONTACT TAIL LENGTH							
Code	"L" Length	Board Thickness					
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]					
94	7.04 [0.277]	4.45 min. [0.175 min.]					

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

#### FEMALE COMPLIANT PRESS-FIT CONNECTOR WITH A.C. PASS-THROUGH CODE 93 OR 94 WITH MOS\*1 -245.0

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





#### **CONTACT HOLE PATTERN**

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.						

#### **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.

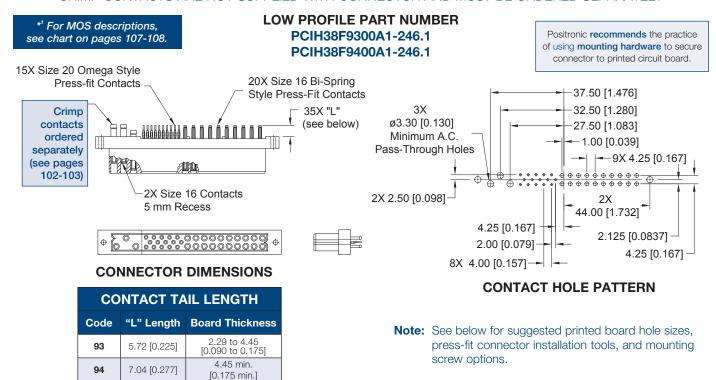


# COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE

Compact
Power
Connectors

#### FEMALE COMPLIANT PRESS-FIT CONNECTOR WITH A.C. PASS-THROUGH CODE 93 OR 94 WITH MOS\*1 -246.1

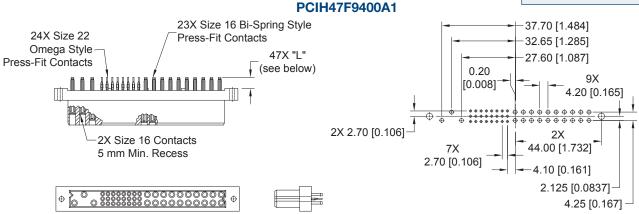
CRIMP CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY



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

## STANDARD PART NUMBER PCIH47F9300A1

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



### CONNECTOR DIMENSIONS

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:

CONTACT HOLE PATTERN

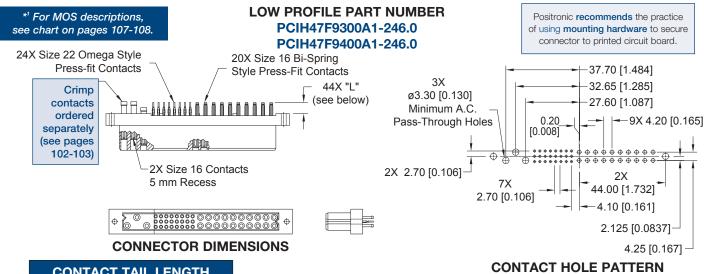
Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

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.

PCIH SERIES

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



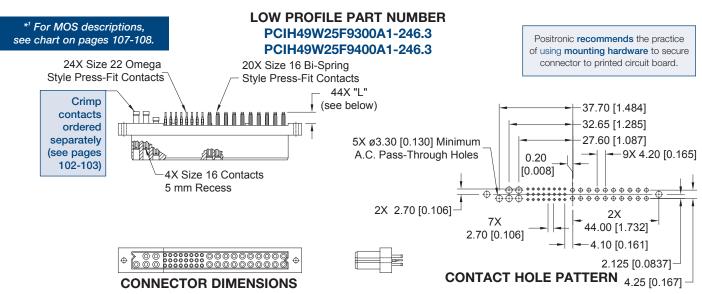
#### **CONTACT TAIL LENGTH**

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.

#### FEMALE COMPLIANT PRESS-FIT CONNECTOR WITH A.C. PASS-THROUGH CODE 93 OR 94 WITH MOS\*1 -246.3

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



#### **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.



# COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE

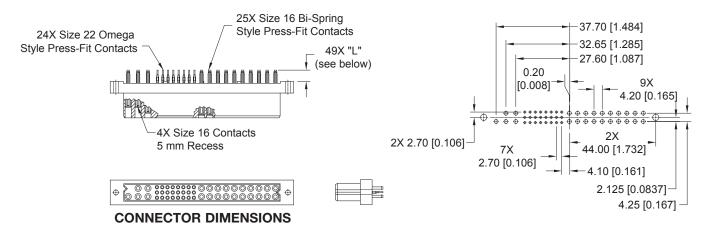
Compact
Power
Connectors

#### FEMALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94 WITH MOS\*1 -379.0

\*1 For MOS descriptions, see chart on pages 107-108.

#### STANDARD PART NUMBER PCIH49W25F9300A1-379.0 PCIH49W25F9400A1-379.0

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



### CONTACT HOLE PATTERN

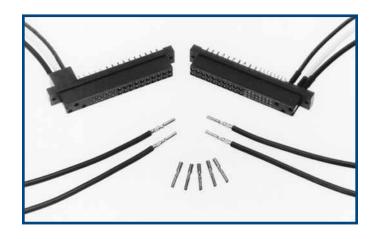
CONTACT TAIL LENGTH						
Code	"L" Length	<b>Board Thickness</b>				
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]				
94	7.04 [0.277]	4.45 min. [0.175 min.]				

#### **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.



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

#### STANDARD PART NUMBER PCIH38M9300A1 PCIH38M9400A1

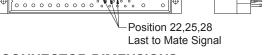
23X Size 16
Bi-Spring Style
Press-Fit Contacts

15X Size 20 Omega Style
Press-Fit Contacts

38X "L"
(see below)

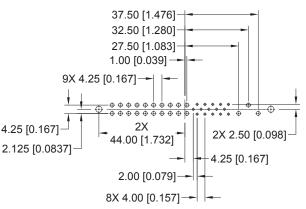
First Mate

Second Mate



#### **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.]					



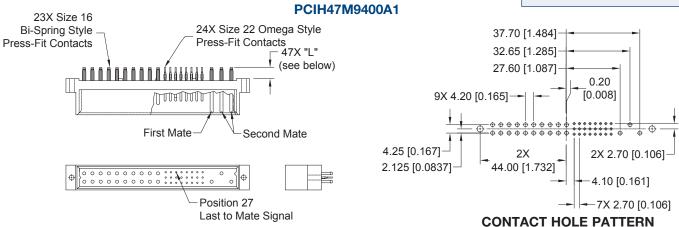
#### **CONTACT HOLE PATTERN**

**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 PCIH47M9300A1 PCIH47M9400A1

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



#### **CONNECTOR DIMENSIONS**

### SUGGESTED PRINTED BOARD HOLE SIZES:

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.]					

Suggest  $\emptyset 3.56 \pm 0.08$  [0.140 $\pm 0.003$ ] 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. \_\_\_

DIMENSIONS ARE IN MILLIMETERS [INCHES]. ALL DIMENSIONS ARE SUBJECT TO CHANGE.



# COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, MALE

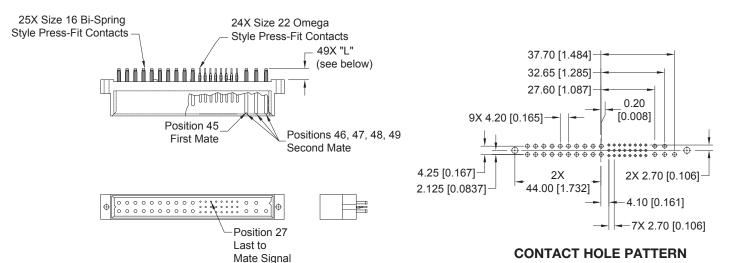
Compact
Power
Connectors

#### MALE COMPLIANT PRESS-FIT CONNECTOR CODE 93 OR 94 WITH MOS\*1 -378.0

\*1 For MOS descriptions, see chart on pages 107-108.

STANDARD PART NUMBER PCIH49W25M9300A1-378.0 PCIH49W25M9400A1-378.0

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  $\emptyset 3.56 \pm 0.08$  [0.140 $\pm 0.003$ ] 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.



ENLARGED DETAIL OF COMPLIANT CONTACT TERMINATIONS

#### 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
EX	AMPLE PC	H 47	F	93	0	0	<b>A</b> 1	/AA	
STEP 1 - BASIC SERI PCIH - PCIH Series	ES								STEP 9 - SPECIAL OPTIONS
STEP 2 - CONNECTO									FOR LISTING OF SPECIAL OPTIONS, SEE SPECIAL OPTIONS APPENDIX ON PAGES 107-108.
38 - 23 size 16 co 20 contacts 38R - 23 size 16 co									ON PAGES 107-106.
20 contacts	inverted termina th contact type	ition "4"							STEP 8 - ENVIRONMENTAL COMPLIANCE OPTIONS
22 contacts 47R - 23 size 16 co	ontacts and 24	size						/	AA - RoHS Compliant
style, use wit 49W25 - 25 size 16 co	inverted termina th contact type ontacts and 24	"4"						į:	NOTE: If compliance to environmental legislation s not required, this step will not be used. Example: PCIH47F9300A1
	ontacts and 24 inverted termina th contact type	ntion					ST	LEP 7	- CONTACT PLATING FOR PRINTED BOARD TYPE CONNECTORS
STEP 3 - CONNECTO	R GENDER			l		l	C	) - Crii	mp contacts ordered separately
F - Female M - Male							A1		ld flash over nickel on mating end and termination
STEP 4 - CONTACT TERMINATION TYPE						A2	[0.0]	ld flash over nickel on mating end and 5.00µ 00020 inch] tin-lead solder coat on termination end. t available with code 93 or code 94 in step 4.	
<ul> <li>3 - Solder, Straight Printed Board Mount with 4.50 [0.177] tail extension for connection systems 1 and 2.</li> <li>4 - Solder, Right Angle (90°) Printed Board Mount with</li> </ul>			1			C1	l - 0.7	6µ [0.000030 inch] gold over nickel on mating end d termination end.	
2.68 [0.106] tail extension for connection systems 1, 2, 3 and 4.  *28 - Contacts must be ordered separately for Panel Mount Cable Connectors, connection system 3, see pages 102-103. Female connector only.					C2	end terr	6μ [0.000030 inch] gold over nickel on mating d and 5.00μ [0.00020 inch] tin-lead solder coat on mination end. Not available with code 93 or code in step 4.		
93 - Press-Fit, Complia or size 22 Straigh board thicknesses	t Printed Board	Mount fo	r use wi	th			D1		$7\mu$ [0.000050 inch] gold over nickel on mating end d termination end.
94 - Press-Fit, Complia or size 22 Straight board thickness of Connection system	ant Termination t Printed Board f 4.45 minimum	Mount fo	r use wi	th			D2	end terr	7μ [0.000050 inch] gold over nickel on mating d and 5.00μ [0.00020 inch] tin-lead solder coat on mination end. Not available with code 93 or code in step 4.
STEP 5 - MOUNTING	STYLE				N	OTE: If	you wo	uld like a	a 2D drawing or 3D model, once you've made
0 - Not Applicable					1				please visit www.connectpositronic.com.

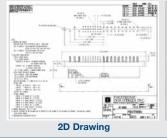
0 - Not Applicable

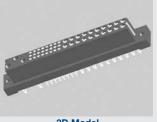
See page 105 for mounting screw options.

#### **STEP 6 - HOODS**

- 0 Not applicable
  - \*1 Female contact variants are readily available. Contact Technical Sales for availability of male contact variants.
  - \*2 Available for 38 and 47 variants. Contact Technical Sales for availability of 49W25 variant.

If you can't find your specific part number on our web site, contact Technical Sales to have one created.





3D Model