

GENERAL PRODUCT INFORMATION

Compact Power Connectors

The PCIB 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 PCIB Series ideal for use in telecom, computer, information systems and industrial applications.

PCIB SERIES CONTACT VARIANTS

FACE VIEW OF MALE AND REAR VIEW OF FEMALE



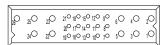


PCIB24W9 VARIANT

PCIB24W9R VARIANT (Inverted Termination)

9 Size 16 Power Contacts and 15 Size 22 Signal Contacts

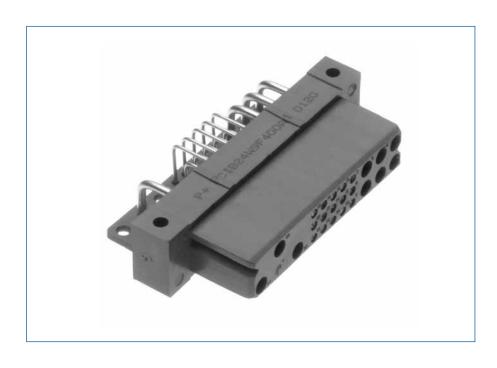




PCIB26W11 VARIANT

PCIB26W11R VARIANT (Inverted Termination)

11 Size 16 Power Contacts and 15 Size 22 Signal Contacts



Compact Power **C**onnectors

TECHNICAL CHARACTERISTICS



MATERIALS AND FINISHES:

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

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 89.

Mounting Screws: Steel, zinc plated.

Jackscrews: Stainless steel, passivated.

ELECTRICAL CHARACTERISTICS:

PCIB Contact Current Ratings, per UL 1977

See Temperature Rise Curves on page 5 for details.

PCIB24W9:

Size 16 Power Contacts:

Positions 22, 23, and 24: 45 amperes continuous,

all contacts under load. Positions 1through 6: 35 amperes continuous.

all contacts under load. Size 22 Signal Contacts: 3 amperes nominal rating.

PCIB26W11:

Size 16 Power Contacts: 34 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 22 Contact: 0.004 ohms maximum.

Per IEC 512-2. Test 2b.

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

Test 3a.

Voltage Proof:

PCIB24W9:

Contacts 22, 23 and 24: 3,000 V r.m.s. Contacts 1 through 6: 1,500 V r.m.s. Contacts 7 through 21: 1,000 V r.m.s.

PCIB26W11:

Contacts 1 through 6 and

1,500 V r.m.s. 22 through 26:

Contacts 7 through 21: 1,000 V r.m.s.

Creepage and Clearance

Distance; minimum:

PCIB24W9:

Contact 24 to Contact 22: 3.2mm [0.126 inch] Contact 23 to Contact 22: 3.2mm [0.126 inch] Contact 24 to Signal Contacts: 6.4mm [0.252 inch] Contact 23 to Signal Contacts: 6.4mm [0.252 inch] Contact 24 to Contact 23: 2.5mm [0.098 inch] Contact 22 to Signal Contacts: 2.0mm [0.079 inch]

Contact 22 to Signal Contacts: 2.0mm [0.079 inch]

Working Voltage:

PCIB24W9:

Contacts 22, 23 and 24: 1,000 V r.m.s. Contacts 1 through 6: 500 V r.m.s.

Contacts 7 through 21: 333 V r.m.s.

PCIB26W11:

Contacts 1 through 6 and

22 through 26: 500 V r.m.s. Contacts 7 through 21: 333 V r.m.s. **MECHANICAL CHARACTERISTICS:**

Male and female connector **Blind Mating System:**

bodies provide "lead-in" for 1.3 mm [0.050 inch] diametral

misalignment.

Polarization: Provided by connector body

desian.

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.

Fixed Contact Retention in Connector Body:

Size 16 Contacts: 45 N [10 lbs.] Size 22 Contacts: 27 N [6 lbs.]

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

duration per IEC 512-6,

Test 12e, 25-watt soldering iron.

Sequential Contact Mating System:

PCIB24W9: PCIB26W11:

First mate contact 22 and last mate contact position 7.

Last mate contact position 7.

Consult Technical Sales for customer specified sequential mating.

Safety "Recessed in

Insulator" Contacts: The following size 16 contacts

are recessed 5.00 mm [0.197 inch] below the face of the female connector insulator per

safety requirements.

Contact positions 23 and 24. PCIB24W9:

PCIB26W11: 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.

250 couplings, minimum.

CLIMATIC CHARACTERISTICS:

Mechanical Operations:

Working Temperature: -55°C to +125°C.

> U.L. Recognized File #E49351 CSA Recognized File #LR54219

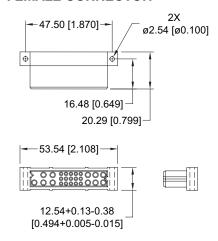
CONNECTOR OUTLINE AND MATING DIMENSIONS

Compact
Power
Connectors

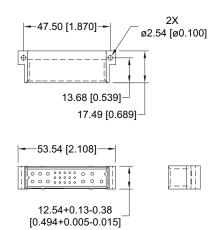
PCIB CONNECTOR OUTLINE DIMENSIONS

RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR

FEMALE CONNECTOR

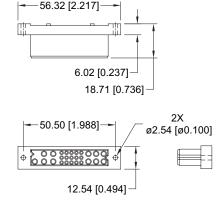


MALE CONNECTOR

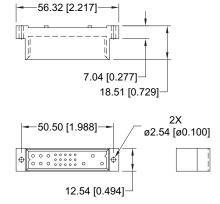


STRAIGHT BOARD MOUNT CONNECTOR

FEMALE CONNECTOR

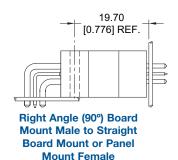


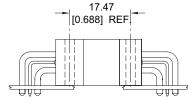
MALE CONNECTOR



PCIB CONNECTOR MATING DIMENSIONS

(FULLY MATED)



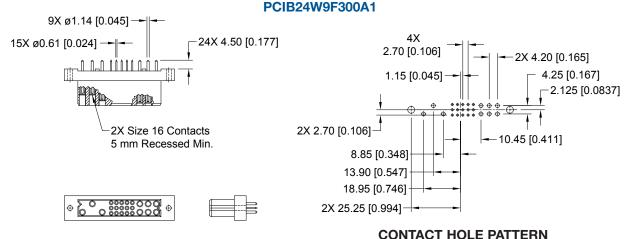


Right Angle (90°) Board Mount Male to Right Angle (90°) Board Mount Female



FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

STANDARD PART NUMBER



CONNECTOR DIMENSIONS

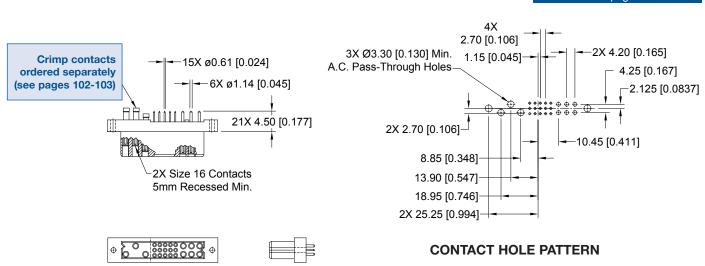
Note: See below for suggested printed board hole sizes.

FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS* -246.5

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

LOW PROFILE PART NUMBER PCIB24W9F300A1-246.5

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



CONNECTOR DIMENSIONS

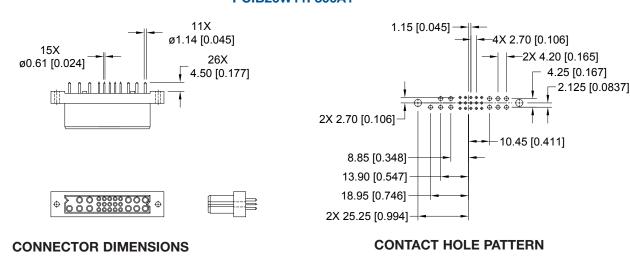


STRAIGHT SOLDER CONNECTOR, FEMALE

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FEMALE STRAIGHT SOLDER CONNECTOR CODE 3

STANDARD PART NUMBER PCIB26W11F300A1



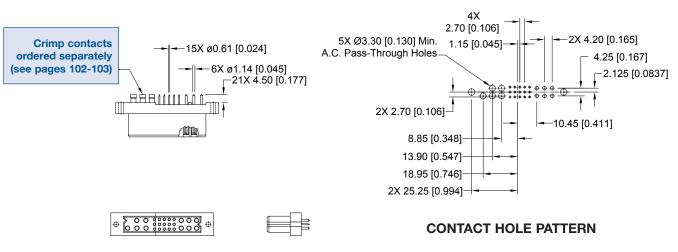
Note: See below for suggested printed board hole sizes.

FEMALE STRAIGHT SOLDER CONNECTOR WITH A.C. PASS-THROUGH CODE 3 WITH MOS* -246.6

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

LOW PROFILE PART NUMBER PCIB26W11F300A1-246.6

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

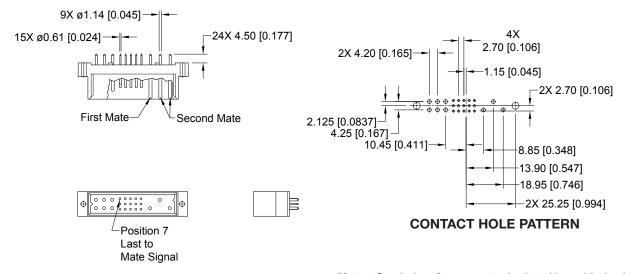


CONNECTOR DIMENSIONS



MALE STRAIGHT SOLDER CONNECTOR CODE 3

STANDARD PART NUMBER PCIB24W9M300A1

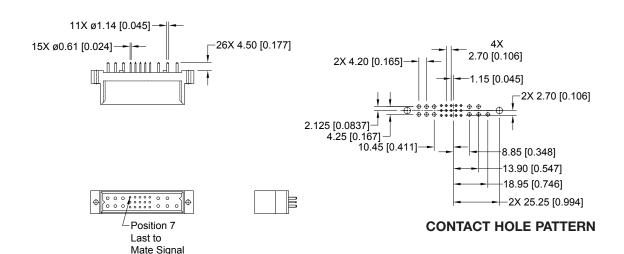


CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

MALE STRAIGHT SOLDER CONNECTOR CODE 3

STANDARD PART NUMBER PCIB26W11M300A1



CONNECTOR DIMENSIONS



STRAIGHT SOLDER CONNECTOR, MALE

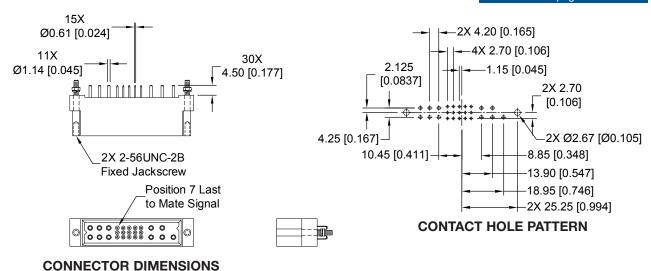
Compact Power **C**onnectors

MALE STRAIGHT SOLDER CONNECTOR WITH JACKSCREW SYSTEM **CODE 3 WITH MOS* -444.0**

OTHER JACKSCREW LENGTH OPTIONS AVAILABLE, CONTACT TECHNICAL SALES FOR DETAILS

STANDARD PART NUMBER PCIB26W11M300A1-444.0

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



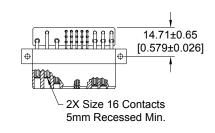
SUGGESTED PRINTED BOARD HOLE SIZES:

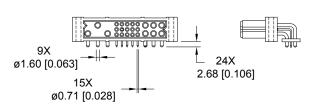
Suggest Ø1.14 [0.045] holes for size 22 contact holes. Suggest Ø2.03 [0.080] holes for size 16 contact holes. Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.



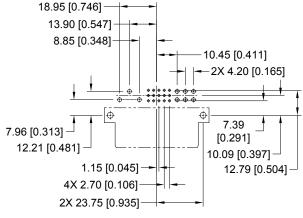
FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR CODE 4

STANDARD PART NUMBER PCIB24W9F400A1





CONNECTOR DIMENSIONS

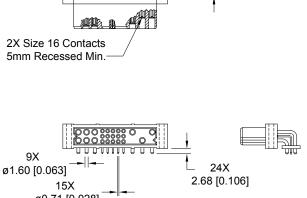


CONTACT HOLE PATTERN

Note: See below for suggested printed board hole sizes.

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

PART NUMBER FOR INVERTED TERMINATION PCIB24W9RF400A1



14.71±0.65

[0.579±0.026]

ø0.71 [0.028]

18.95 [0.746] 13.90 [0.547] 8.85 [0.348] 10.45 [0.411] 2X 4.20 [0.165] 12.21 [0.481] 7.96 [0.313] 12.79 [0.504] 10.09 [0.397] 7.39 [0.291] 4X 2.70 [0.106] 1.15 [0.045] 2X 23.75 [0.935] **CONTACT HOLE PATTERN**

CONNECTOR DIMENSIONS



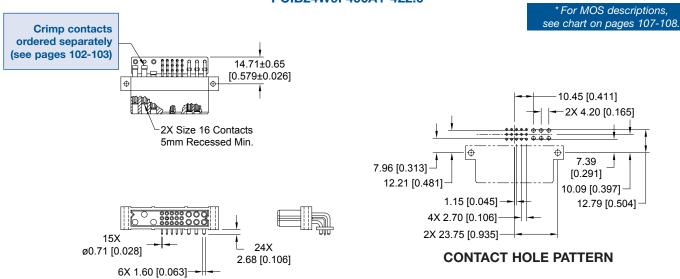
RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, FEMALE

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FEMALE RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR WITH A.C. PASS-THROUGH CODE 4 WITH MOS* -422.0

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

LOW PROFILE PART NUMBER PCIB24W9F400A1-422.0



CONNECTOR DIMENSIONS

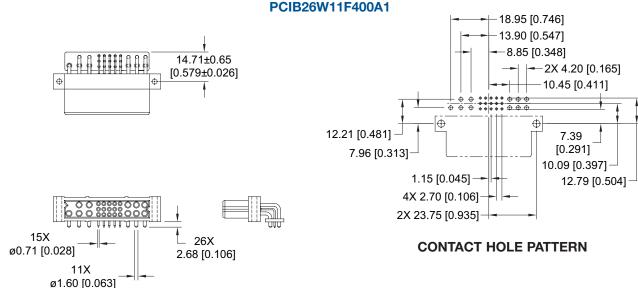
SUGGESTED PRINTED BOARD HOLE SIZES:

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

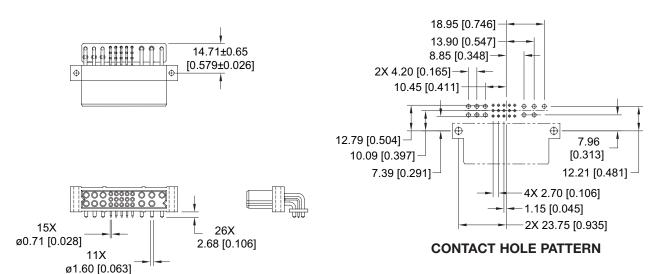


CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

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

PART NUMBER FOR INVERTED TERMINATION PCIB26W11RF400A1



CONNECTOR DIMENSIONS

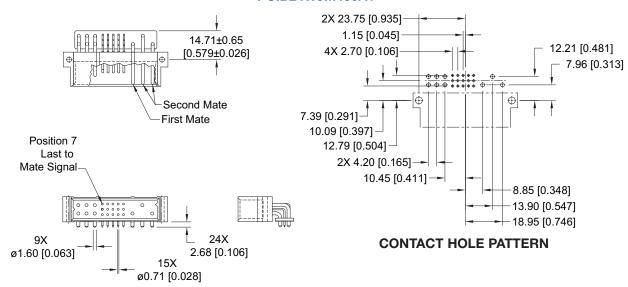


RIGHT ANGLE (90°) BOARD MOUNT CONNECTOR, MALE

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

STANDARD PART NUMBER PCIB24W9M400A1

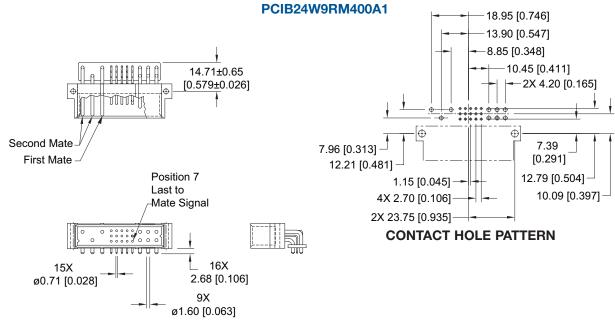


CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

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

PART NUMBER FOR INVERTED TERMINATION

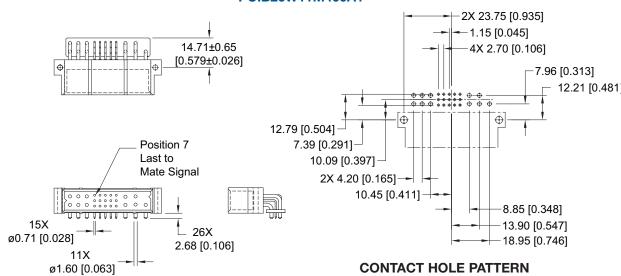


CONNECTOR DIMENSIONS



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

STANDARD PART NUMBER PCIB26W11M400A1

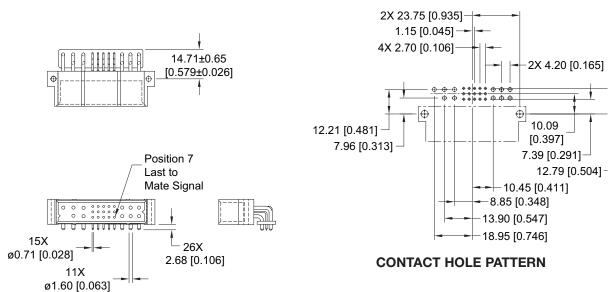


CONNECTOR DIMENSIONS

Note: See below for suggested printed board hole sizes.

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

PART NUMBER FOR INVERTED TERMINATION PCIB26W11RM400A1



CONNECTOR DIMENSIONS



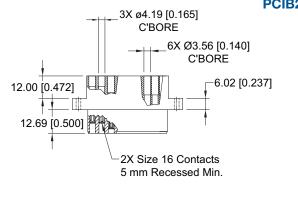
PANEL MOUNT CONNECTOR, FEMALE

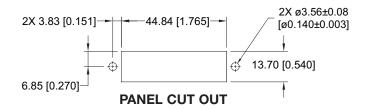
Compact
Power
Connectors

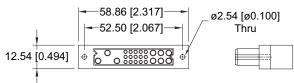
FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

STANDARD PART NUMBER PCIB24W9F8000





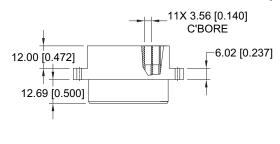


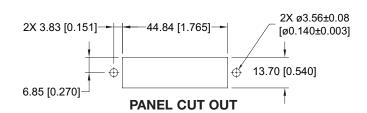
CONNECTOR DIMENSIONS

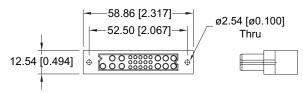
FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR CODE 8

CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

STANDARD PART NUMBER PCIB26W11F8000







CONNECTOR DIMENSIONS

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

PANEL MOUNT CONNECTOR, FEMALE



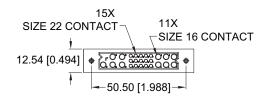
* For MOS descriptions, see chart on pages 107-108.

FEMALE PANEL MOUNT CRIMP CONTACT CONNECTOR WITH JACKSCREW SYSTEM CODE 8 WITH MOS* -443.0

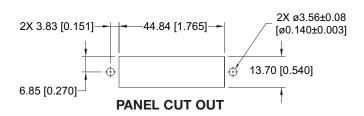
CONTACTS ARE NOT SUPPLIED WITH CONNECTOR AND MUST BE ORDERED SEPARATELY

STANDARD PART NUMBER PCIB26W11F8000-443.0

11X 43.70 [1.720] 12.00 [0.472] 18.71 [0.736] 11X 03.56 [0.140] C'BORE ROTATING JACKSCREW



CONNECTOR DIMENSIONS





COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE

Compact Power **C**onnectors

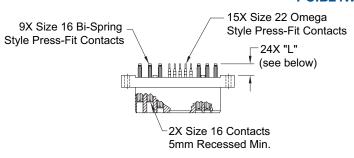
FEMALE COMPLIANT PRESS-FIT CONNECTORS

CODE 93 or 94

STANDARD PART NUMBER

PCIB24W9F9300A1 PCIB24W9F9400A1

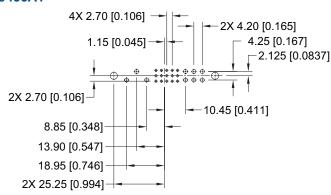
Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.





CONNECTOR DIMENSIONS

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

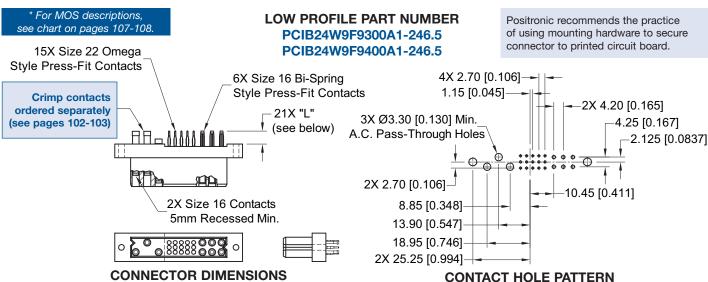


CONTACT HOLE PATTERN

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 CONNECTORS WITH A.C. PASS-THROUGH CODE 93 OR 94 WITH MOS* -246.5

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.

For mounting screw options, see page 105.

COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, FEMALE



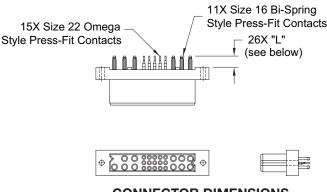
FEMALE COMPLIANT PRESS-FIT CONNECTOR

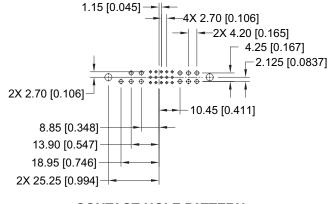
CODE 93 or 94

STANDARD PART NUMBER PCIB26W11F9300A1

PCIB26W11F9400A1

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





CONNECTOR DIMENSIONS

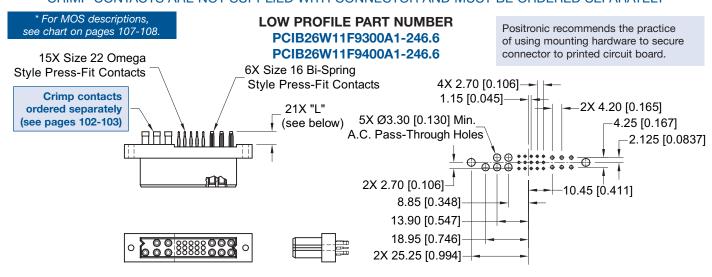
CONTACT TAIL LENGTH						
Code	"L" Length	Board Thickness				
93	5.72 [0.225]	2.29 to 4.45 [0.090 to 0.175]				
94	7.04 [0.277]	4.45 min. [0.175 min.]				

CONTACT HOLE PATTERN

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* -246.6

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



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, MALE

Compact Power **C**onnectors

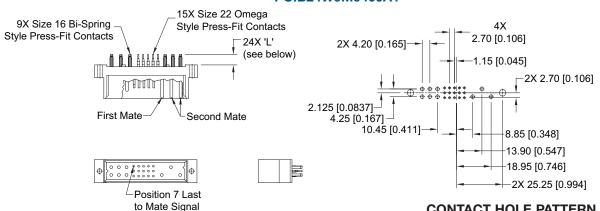
MALE COMPLIANT PRESS-FIT CONNECTOR

CODE 93 or 94

STANDARD PART NUMBER

PCIB24W9M9300A1 PCIB24W9M9400A1

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.

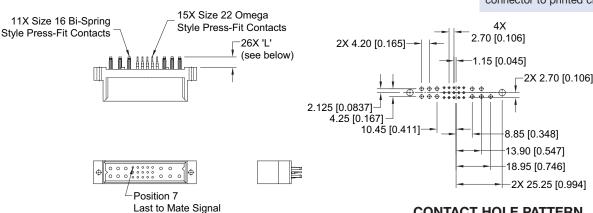
CONTACT HOLE PATTERN

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.]				

MALE COMPLIANT PRESS-FIT CONNECTOR **CODE 93 or 94**

STANDARD PART NUMBER

PCIB26W11M9300A1 PCIB26W11M9400A1 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.

For mounting screw options, see page 105.

COMPLIANT PRESS-FIT BOARD MOUNT CONNECTOR, MALE

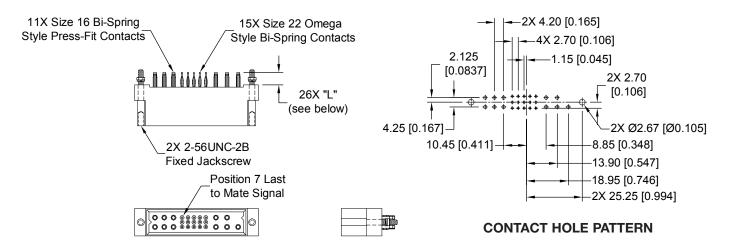


MALE COMPLIANT PRESS-FIT CONNECTOR WITH JACKSCREW SYSTEM CODE 93 OR 94 WITH MOS* -444.0

OTHER JACKSCREW LENGTH OPTIONS AVAILABLE, CONTACT TECHNICAL SALES FOR DETAILS

* For MOS descriptions, see chart on pages 107-108. STANDARD PART NUMBER PCIB26W11M9300A1-444.0 PCIB26W11M9400A1-444.0

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.]				



PCIB ORDERING INFORMATION

Compact
Power
Connectors

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	PCIB	26W11	F	93	0	0	A1	/AA	

STEP 1 - BASIC SERIES

PCIB - PCIB Series

STEP 2 - CONNECTOR VARIANTS

- 24W9 9 size 16 contacts and 15 size 22 contacts
- 24W9R 9 size 16 contacts and 15 size 22 contacts. Inverted termination style, use with contact type "4"
- 26W11 11 size 16 contacts and 15 size 22 contacts
- 26W11R 11 size 16 contacts and 15 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.
- 4 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.

STEP 5 - MOUNTING STYLE

0 - Standard Option

See page 105 for mounting screw options.

STEP 6 - HOODS

0 - Not applicable

STEP 9 - SPECIAL OPTIONS

FOR LISTING OF SPECIAL OPTIONS, SEE SPECIAL OPTIONS APPENDIX ON PAGES 111 AND 112.

STEP 8 - ENVIRONMENTAL COMPLIANCE OPTIONS

/AA - RoHS Compliant

NOTE: If compliance to environmental legislation is not required, this step will not be used. Example: PCIB26W11F9300A1

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 0.76μ [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 1.27μ [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.

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.



