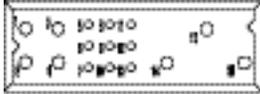


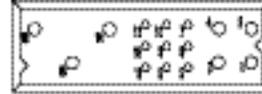
The PCIC Series encompasses all of the features of the PCIH Series in a 1U package. Reliability, high current capacity and many system management connections make the PCIC Series ideal for use in telecom, computer, information systems and industrial applications.

## **PCIC SERIES CONTACT VARIANTS**

FACE VIEW OF MALE AND REAR VIEW OF FEMALE

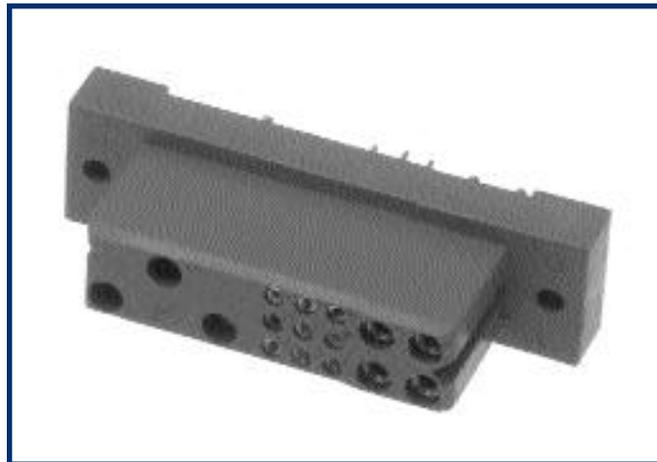


PCIC16W7 VARIANT



PCIC16W7R VARIANT (inverted)

7 Size 16 Power Contacts and 9 Size 22 Signal Contacts



**MATERIALS AND FINISHES:**

Insulator:	Glass-filled polyester, UL 94V-0, blue color.
Contacts:	High conductivity precision-machined copper alloy with gold flash over nickel plate. Other finishes available upon request.
Mounting Screws:	Steel, zinc plated.

**ELECTRICAL CHARACTERISTICS:**

**PCIC Contact Current Ratings**

*Consult Technical Sales for Temperature Rise Curve details.*

Size 16 Power Contacts:	
Positions 14, 15, and 16:	40 amperes continuous, all contacts under load.
Positions 1 through 4:	28 amperes continuous, all contacts under load.
Size 22 Signal Contacts:	3 amperes nominal rating.
Initial Contact Resistance; maximum:	
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:	
PCIC16W7:	
Contacts 14, 15, and 16:	3,000 V r.m.s.
Contacts 1 through 4:	1,500 V r.m.s.
Contacts 5 through 13:	1,000 V r.m.s.
Creepage and Clearance Distance; minimum:	
PCIC16W7:	
Contact 16 to Contact 14:	3.2mm [0.126 inch]
Contact 15 to Contact 14:	3.2mm [0.126 inch]
Contact 16 to Signal Contacts:	6.4mm [0.252 inch]
Contact 15 to Signal Contacts:	6.4mm [0.252 inch]
Contact 16 to Contact 15:	2.5mm [0.098 inch]
Contact 14 to Signal Contacts:	2.0mm [0.079 inch]
Working Voltage:	
PCIC16W7:	
Contacts 14, 15 and 16:	1,000 V r.m.s.
Contacts 1 through 4:	500 V r.m.s.
Contacts 5 through 13:	333 V r.m.s.

**MECHANICAL CHARACTERISTICS:**

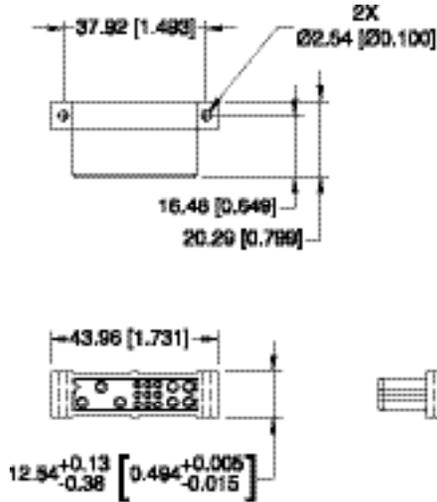
Blind Mating System:	Male and female connector bodies provide "lead-in" for 1.3mm [0.050 inch] diametral misalignment.
Polarization:	Provided by connector body design.
Fixed Contacts:	Printed board terminations, both straight and right angle. Size 16 female contacts feature "Closed Entry" design. Size 22 feature rugged "Robi-D" design.
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:	
PCIC16W7:	First mate contact 14 and last mate contact position 5.
	<i>Consult Technical Sales for customer specified sequential mating.</i>
Safety "Recessed in Insulator" Contacts:	
PCIC16W7:	The following size 16 contacts are recessed 5mm [0.197 inch] below the face of the female connector insulator per safety requirements. Contact positions 15 and 16.
Compliant Terminations:	Size 16 and 22 contacts are available with Compliant Contact Terminations.
Printed Board Mounting:	Mounting holes provided in connector body for printed board mounting. Self-tapping screws are available.
Mechanical Operations:	250 couplings, minimum.
<b>CLIMATIC CHARACTERISTICS:</b>	
Working Temperature:	-55°C to +125°C.

U.L., C.S.A., and TUV recognitions are in process. Consult Technical Sales for updated information.

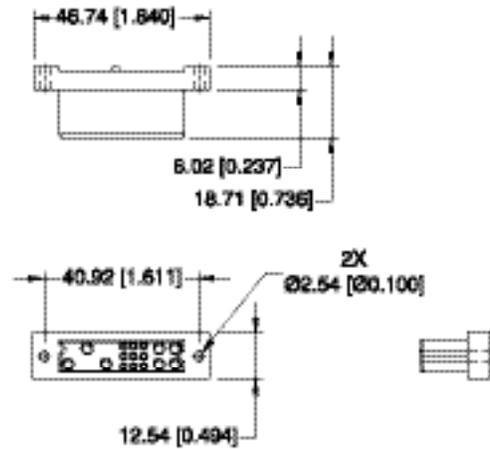
DIMENSIONS ARE IN MILLIMETERS [INCHES]  
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

PCIC CONNECTOR OUTLINE DIMENSIONS

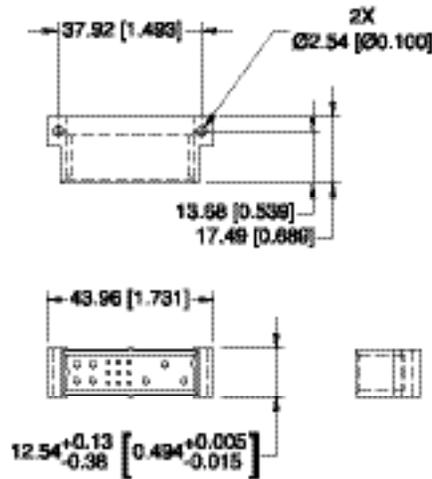
Right Angle Board Mount Connector  
Female Connector Dimensions



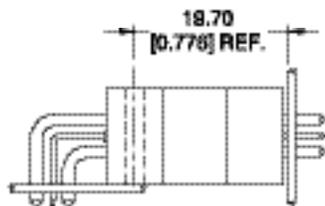
Straight Board Mount Connector  
Female Connector Dimensions



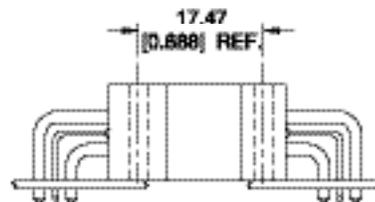
Right Angle Board Mount Connector  
Male Connector Dimensions



PCIC CONNECTOR MATING DIMENSIONS  
(FULLY MATED)



Straight Board Mount  
Female to Right  
Angle Board Mount  
Male.



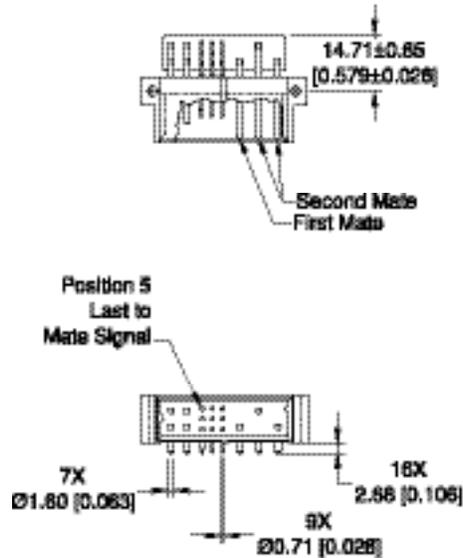
Right Angle Board  
Mount Female to  
Right Angle Board  
Mount Male.

**COMPACT  
POWER  
CONNECTOR**

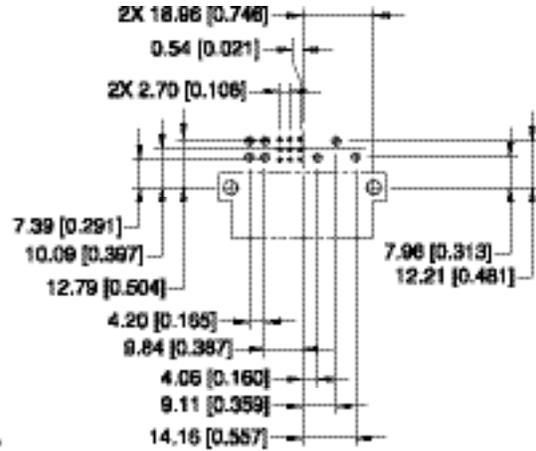
**PCIC RIGHT ANGLE  
BOARD MOUNT CONNECTORS,  
MALE**

**COMPACT  
POWER  
CONNECTOR**

**STANDARD PART NUMBER:  
PCIC16W7M400A1**



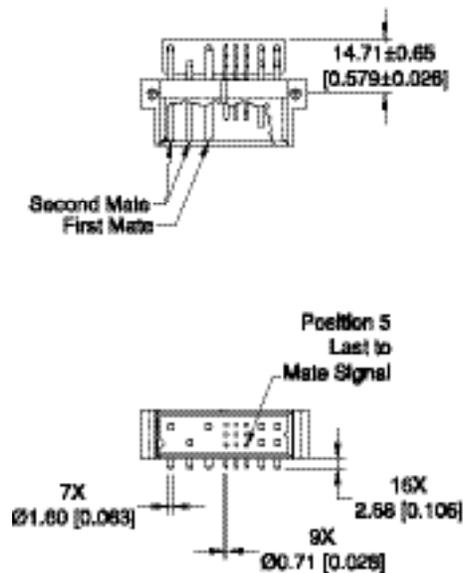
**CONNECTOR DIMENSIONS**



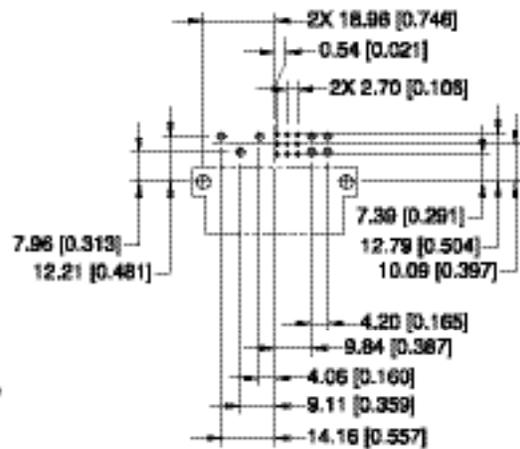
**CONTACT HOLE PATTERN**

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

**INVERTED PART NUMBER:  
PCIC16W7RM400A1**



**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.

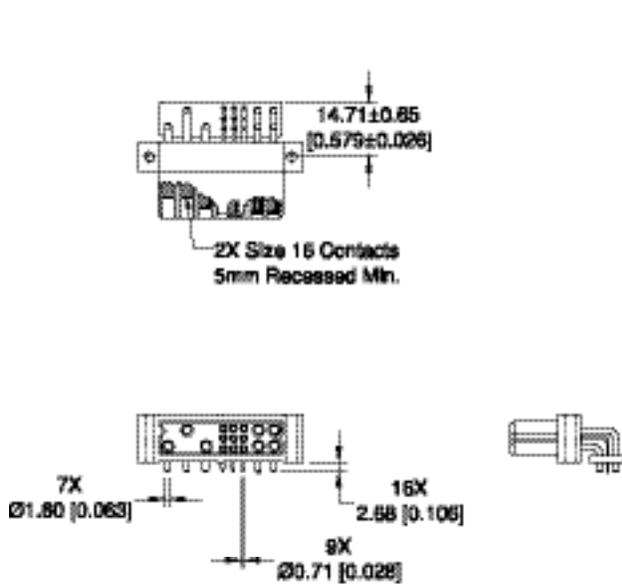
DIMENSIONS ARE IN MILLIMETERS [INCHES]  
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

**COMPACT  
POWER  
CONNECTOR**

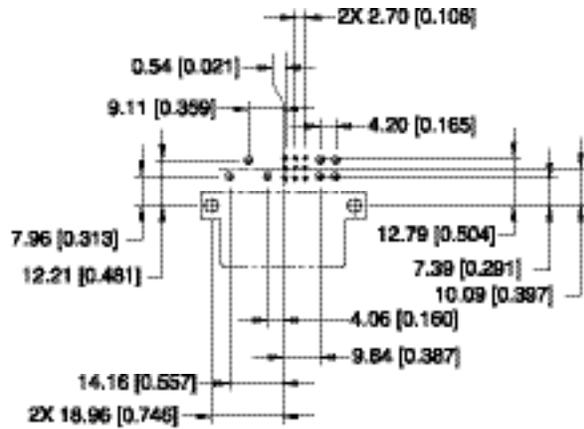
**PCIC RIGHT ANGLE  
BOARD MOUNT CONNECTORS,  
FEMALE**

**COMPACT  
POWER  
CONNECTOR**

**STANDARD PART NUMBER:  
PCIC16W7F400A1**



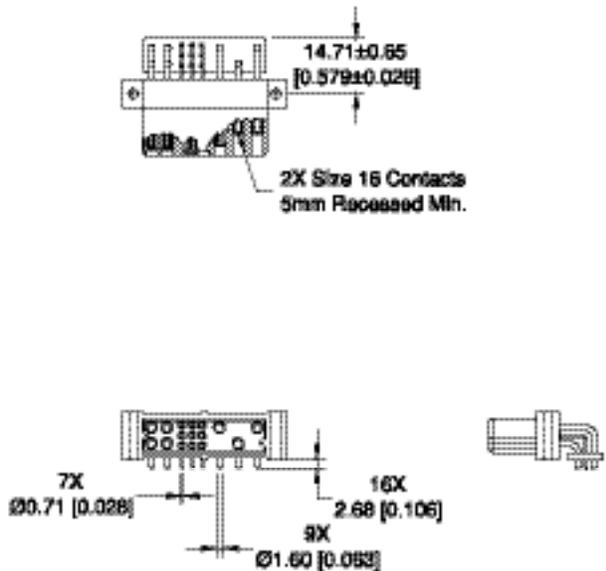
**CONNECTOR DIMENSIONS**



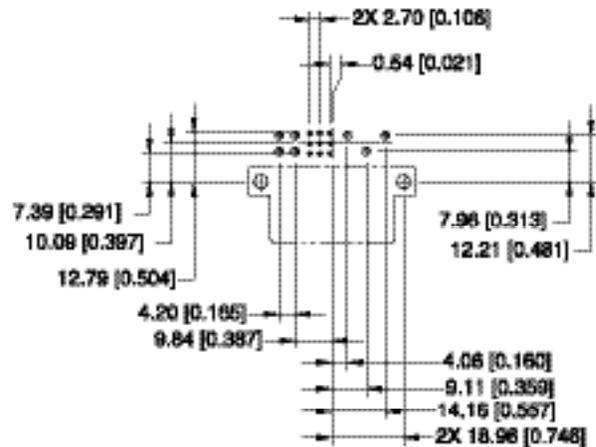
**CONTACT HOLE PATTERN**

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

**INVERTED PART NUMBER:  
PCIC16W7RF400A1**



**CONNECTOR DIMENSIONS**



**CONTACT HOLE PATTERN**

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

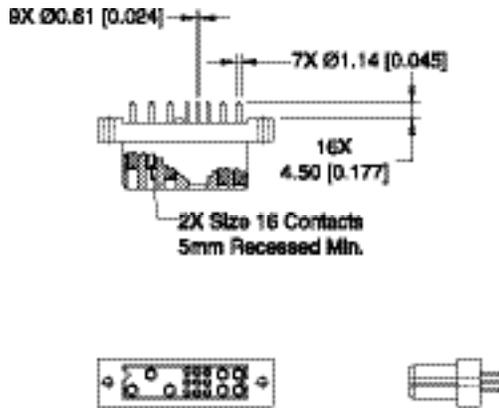
**SUGGESTED PRINTED BOARD HOLE SIZES:**  
Suggest Ø1.14 [0.045] holes for size 22 contact holes.  
Suggest Ø2.03 [0.080] holes for size 16 contact holes.  
Suggest Ø3.56±0.08 [0.140±0.003] holes for connector mounting holes.

# COMPACT POWER CONNECTOR

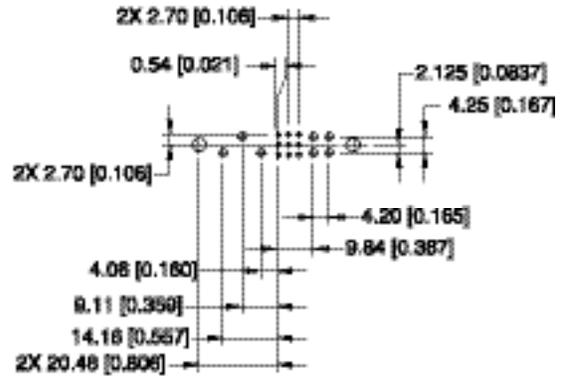
# PCIC STRAIGHT SOLDER AND COMPLIANT BOARD MOUNT CONNECTORS, FEMALE

# COMPACT POWER CONNECTOR

STANDARD PART NUMBER:  
PCIC16W7F300A1



CONNECTOR DIMENSIONS

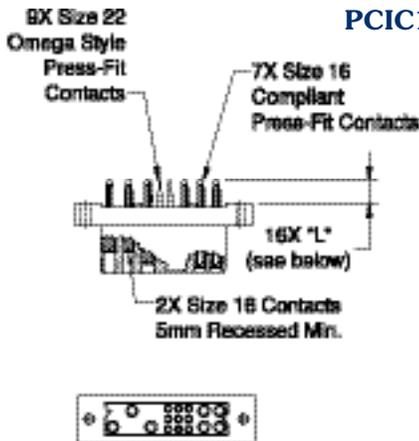


CONTACT HOLE PATTERN

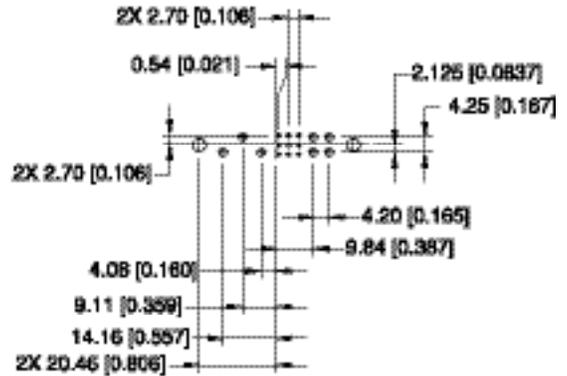
### SUGGESTED PRINTED BOARD HOLE SIZES:

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.

STANDARD PART NUMBER:  
PCIC16W7F9300A1  
PCIC16W7F9400A1

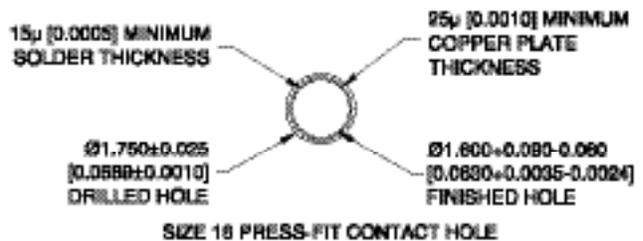


CONNECTOR DIMENSIONS



CONTACT HOLE PATTERN

### SUGGESTED PRINTED BOARD HOLE SIZES



SIZE 16 PRESS-FIT CONTACT HOLE



SIZE 22 PRESS-FIT CONTACT HOLE

### CONTACT TAIL LENGTH

CODE NUMBER	"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.]

FOR COMPLIANT TERMINATION PRESS-FIT CONTACTS SPECIFY CODE NUMBER IN STEP 4 OF ORDERING INFORMATION.

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

SUGGEST Ø 3.56±0.08 [0.140±0.003] HOLES  
FOR CONNECTOR MOUNTING POSITIONS.

**ORDERING INFORMATION – CODE NUMBERING SYSTEM**

Specify Complete Connector By Following Steps 1 Through 8  
Insert "0" When Step Is Not Used

STEP	1	2	3	4	5	6	7	8
	PCIC	16W7	F	93	0	0	A1	

**STEP 1 - Basic Series**  
PCIC - PCIC SERIES

**STEP 2 - Connector Variants**  
16W7 – 7 Size 16 Contacts and 9 Size 22  
16W7R – 7 Size 16 Contacts and 9 Size 22  
Inverted style, use with Contact Type "4"

**STEP 3 - Connector Gender**  
M – Male  
F – Female

**STEP 4 - Type of Contact**  
\*3 – Solder, Straight Printed Board Mount with 4.50 [0.177] tail extension for connection systems 1.  
4 – Solder, Right Angle Printed Board Mount with 2.68 [0.106] tail extension for connection systems 1 and 4.  
\*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 systems 1 and 2.  
\*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 systems 1 and 2.

**STEP 5 - Mounting Style**  
0 – Standard Option

**STEP 8 - Special Options**  
Consult technical sales for special options.

**STEP 7 - Contact Plating for Printed Board Type Connectors**  
A1 – Gold flash over nickel on mating end and gold over nickel on termination end.  
A2 – Gold flash over nickel on mating end and 5.00 microns [0.000200 inch] solder coat on termination end. Not available with code 93 or code 94 in step 4.  
C1 – 0.80 microns [0.000030 inch] gold over nickel on mating end and 0.80 microns [0.000030 inch] gold over nickel on termination end.  
C2 – 0.80 microns [0.000030 inch] gold over nickel on mating end and 5.00 microns [0.000200 inch] solder coat on termination end. Not available with code 93 or code 94 in step 4.

**STEP 6 - Hoods**  
0 – Not applicable

\* Female contact variants are readily available. Consult Technical Sales for availability of male contact variants.