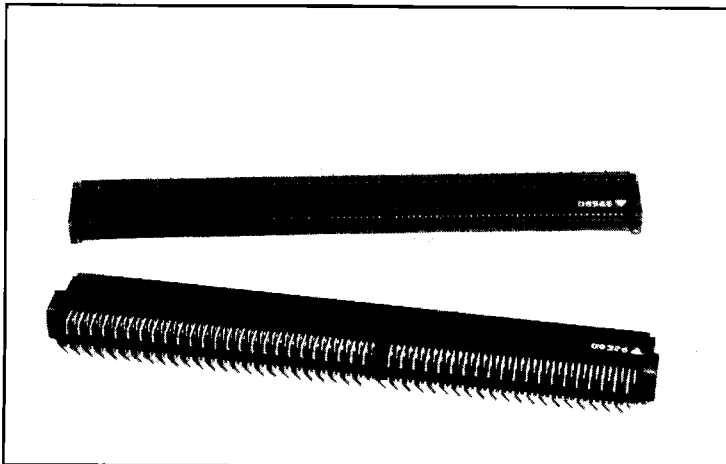


## MAXI-MATE 2-PIECE CONNECTORS

### P50 Series



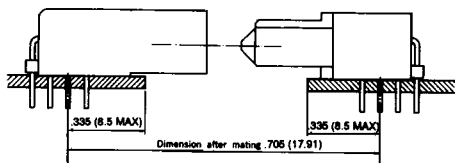
- 120 to 200 position product
- 3-dimensional mating
- Low insertion/withdrawal force

RN PAK-50®

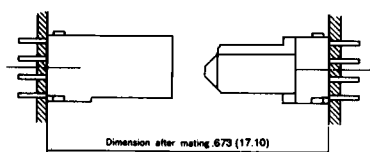
### How to Order RN PAK-50 Maxi-Mate 2-Piece

Series P50 - XXX P - R1 - TG  
 Number of Contacts: 120, 140, 160, 180, 200  
 P=Plug Connector  
 S=Socket Connector  
 Termination Style:  
 R1=Solder, Straight/.118" (3.0) with retent clip  
 RR1=Solder, Right Angle/.118" (3.0) with retent clip  
 Plating Code:  
 Specify TG

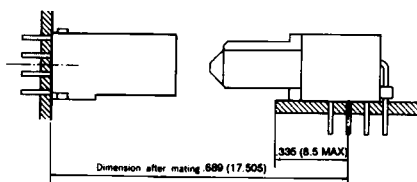
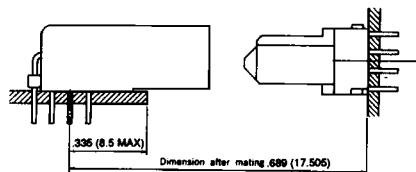
#### Horizontal Mating



#### Parallel Mating



#### Vertical Mating



#### Materials:

Body: Glass-filled black nylon  
Contact: Phosphor Bronze

#### Performance Characteristics:

Dielectric Withstanding Voltage: 650 volts AC  
 Contact Resistance: 25mΩ or less  
 Insulation Resistance: 1000MΩ or more at 500 volts DC  
 Current Rating: 0.5 Ampere/contact  
 Flammability: UL 94 V-O  
 Temperature Range: -55°C to + 105°C

#### Plating Description:

TG= 10 μinch (.254 μm) minimum  
 Gold on contact area  
 80 μinch (2.03 μm) minimum  
 Tin on terminal area  
 Underplate of 80 μinch  
 (2.03 μm) minimum nickel

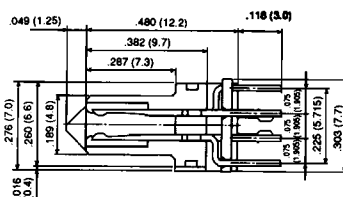
#### Agency Approval:



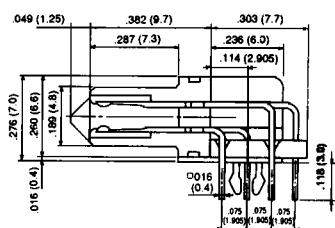
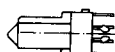
#E73746

Contact factory for additional plating options.

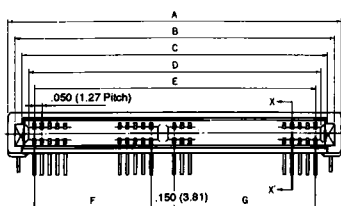
## Straight



### SECTION X-X

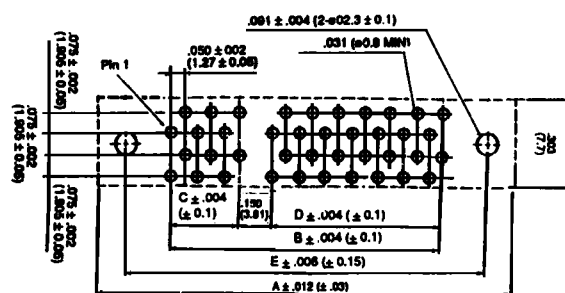


**SECTION X-X**



No. of Contacts	A	B	C	D	E	F	G	H
120	3.406 (86.50)	3.311 (84.10)	3.207 (81.46)	3.129 (79.48)	3.050 (77.47)	0.950 (24.13)	1.950 (49.53)	3.300 (83.82)
140	3.906 (99.20)	3.811 (96.80)	3.707 (94.16)	3.629 (92.18)	3.550 (90.17)	0.950 (24.13)	2.450 (62.23)	3.800 (96.52)
160	4.406 (111.90)	4.311 (109.50)	4.207 (106.86)	4.129 (104.88)	4.050 (102.87)	1.450 (36.83)	2.450 (62.23)	4.300 (109.22)
180	4.906 (124.61)	4.811 (122.17)	4.707 (119.63)	4.629 (117.57)	4.55 (115.57)	1.950 (49.53)	2.450 (62.23)	4.800 (121.92)
200	5.406 (137.30)	5.311 (134.90)	5.207 (132.28)	5.129 (130.28)	5.050 (128.27)	2.450 (62.23)	2.450 (62.23)	5.300 (134.62)

## Straight



Pin 1

$A \pm .012 (\pm 0.3)$

$.091 \pm .004 (2\text{-}\phi 0.3 \pm 0.1)$

$.031 (\phi 0.8 \text{ MIN})$

$.050 \pm .002 (1.27 \pm 0.05)$

$.076 \pm .002 (1.905 \pm 0.05)$

$.076 \pm .002 (1.905 \pm 0.05)$

$.335 (8.5 \text{ MAX})$

$C \pm .004 (\pm .01)$

$150 (3.81)$

$D \pm .004 (\pm 0.1)$

$B \pm .006 (\pm 0.15)$

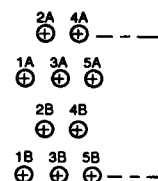
$E \pm .004 (\pm 0.1)$

$.734 (18.65)$

No. of Contacts	A	B	C	D	E
120	3.406 (86.50)	3.050 (77.47)	0.950 (24.13)	1.950 (49.53)	3.300 (83.82)
140	3.906 (99.20)	3.550 (90.17)	0.950 (24.13)	2.450 (62.23)	3.800 (96.52)
160	4.406 (111.90)	4.050 (102.87)	1.450 (36.83)	2.450 (62.23)	4.300 (109.22)
180	4.906 (124.60)	4.550 (115.57)	1.950 (49.53)	2.450 (62.23)	4.800 (121.92)
200	5.406 (137.30)	5.050 (128.27)	2.450 (62.23)	2.450 (62.23)	5.300 (134.62)

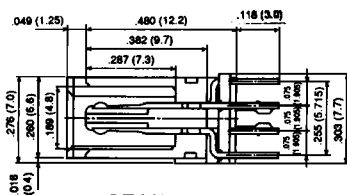
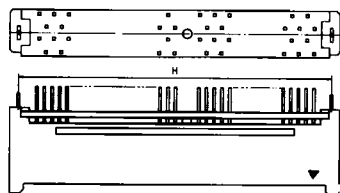
## PIN OUT IDENTIFICATION

## Sockets

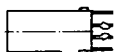


## PLUGS

## Straight

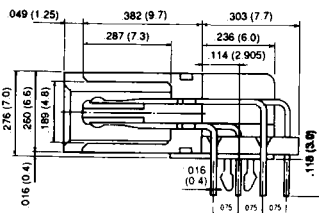
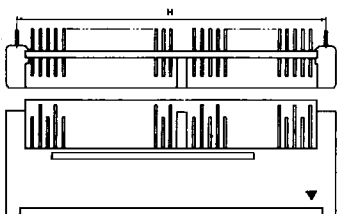


## SECTION X-X



No. of Contacts	A	B	C	D	E	F	G	H
120	3.406 (86.50)	3.327 (84.50)	3.223 (81.87)	3.117 (78.17)	3.050 (77.47)	0.950 (24.13)	1.950 (49.53)	3.300 (83.82)
140	3.908 (99.20)	3.827 (97.20)	3.723 (94.57)	3.617 (91.87)	3.550 (90.17)	0.950 (24.13)	2.450 (62.23)	3.800 (96.52)
160	4.406 (111.90)	4.327 (109.90)	4.223 (107.27)	4.117 (104.57)	4.050 (102.87)	1.450 (36.83)	2.450 (62.23)	4.300 (109.22)
180	4.906 (124.60)	4.827 (122.60)	4.723 (119.77)	4.617 (117.35)	4.550 (115.57)	1.950 (49.53)	2.450 (62.23)	4.800 (121.92)
200	5.406 (137.30)	5.327 (135.31)	5.223 (132.87)	5.117 (129.97)	5.050 (128.27)	2.450 (62.23)	2.450 (62.23)	5.300 (134.62)

## Right Angle

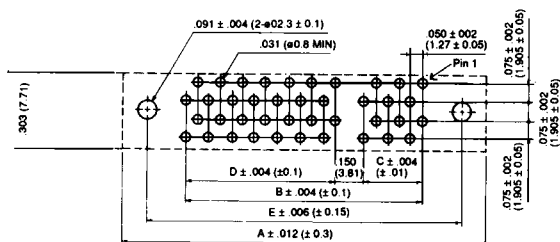


## SECTION X-X



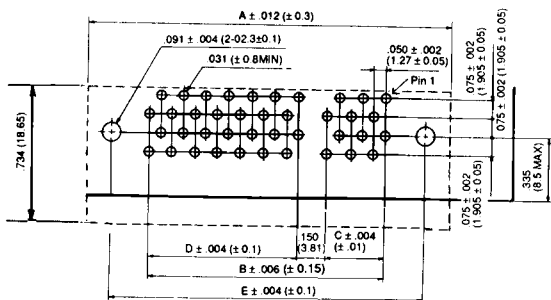
# Printed Circuit Board Layout

## Straight



No. of Contacts	A	B	C	D	E
120	3.406 (86.50)	3.050 (77.47)	0.950 (24.13)	1.950 (49.53)	3.300 (83.82)
140	3.906 (99.20)	3.550 (90.17)	0.950 (24.13)	2.450 (62.23)	3.800 (96.52)
160	4.406 (111.90)	4.050 (102.87)	1.450 (36.83)	2.450 (62.23)	4.300 (109.22)
180	4.906 (124.60)	4.550 (115.57)	1.950 (49.53)	2.450 (62.23)	4.800 (121.92)
200	5.406 (137.30)	5.050 (128.27)	2.450 (62.23)	2.450 (62.23)	5.300 (134.62)

## Right Angle



## PIN OUT IDENTIFICATION

## Plugs

