



## Company Profile:

Sunkye International Co., Limited.(Connector) Business Group, with sixty five years of experience, specializes in designing and producing connectors, related components and cables. A wide range of connector products, twist pin connector, optical fiber connector, RF coaxial connector, separable connector, custom and application-

# *Company profile*

specific connector, etc, which are widely used in military area: aerospace, aviation, electrical, ship-building, defense system, etc and civil area: communication, telecom, automotive, rail, etc.

Design team focuses on meeting customers' requirement with continuous innovative technology, manufacture team provides high quality products by utilizing advanced equipments in standardized processes to ensure customers' benefits.

Sunkye is ISO 9001 certified, UL, VDE, CE certification passed, and ensures products quality by testing in realistic conditions with advanced test facilities, professional test employees.

Sunkye team is committed to offering high quality products, best service, prompt delivery and competitive price for you.



## Manufacture Equipment:

Five-Axis CNC, AGIE EDM, SODICK WEDM-LS, 40G Vector Network Analyzers, Vacuum Heat Treatment Equipment, Glass-sintered System, Laser Processing Center, High Velocity Ram Machine, Gold, Nickel and Cadmium Plating Production Line, Thermosetting Injection Machine, Thermoplastic Injection Machine, Swiss Automatic Lathe, etc.

## Test Facilities:

Comprehensive Test Instrument of Temperature, Humidity and Vibration; Experimental Box of Temperature and Shock; layer thickness meter; Coordinate Measurement Machine, etc.



MIL-DTL-83513 Micro-D Connectors

**SUNKYE**



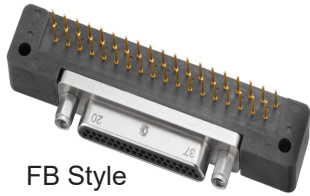
# CONTENT



**MIL-DTL-83513 Micro-D Connectors  
R04A Series Right Angle to PCB Connectors**

# MIL-DTL-83513 Micro-D Connectors

## R04A Series Right Angle To PCB Connectors



FB Style



FA Style

### Brief Introduction

- Micro-D Connectors
- Twist Pin Contacts, High Density
- Metal Shell, Nickel, Gold or Cadmium Plating
- Right Angle to PCB Connectors
- Meets MIL-DTL-83513

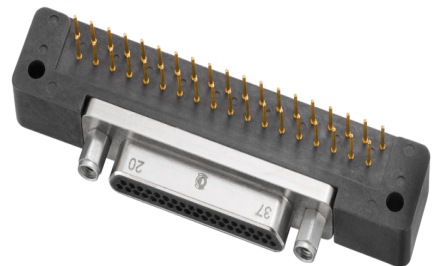
### Specifications

■ Environment Temperature:	-55°C~+125°C
■ Vibration:	10Hz~2000Hz, 196m/s <sup>2</sup>
■ Random Vibration:	Power spectrum density 0.4G <sup>2</sup> /Hz, root square value of total acceleration of 23.1G
■ Shock:	735m/s <sup>2</sup> 11sm
■ Rated Current:	3A
■ Contact Resistance:	≤10mΩ
■ Insulation Resistance:	≥5000MΩ
■ Dielectric Strength:	800V
■ Durability:	500 times

### Product Stereogram

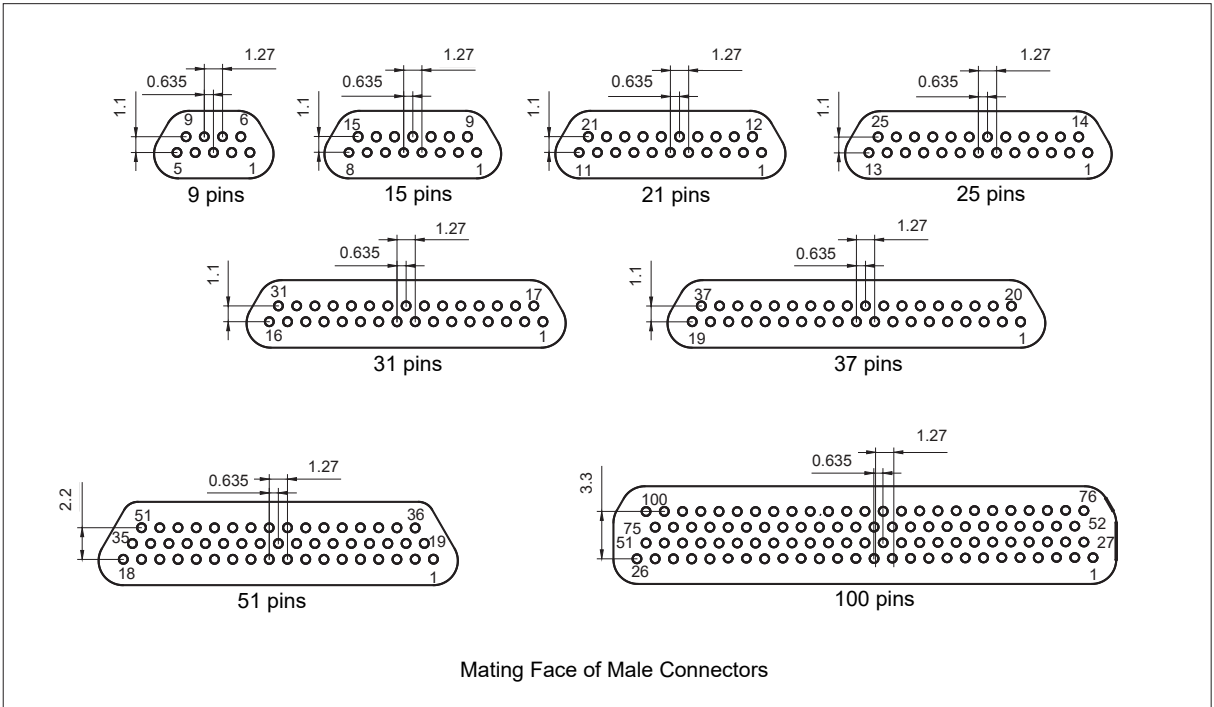


FA Style



FB Style


## Contact Arrangements



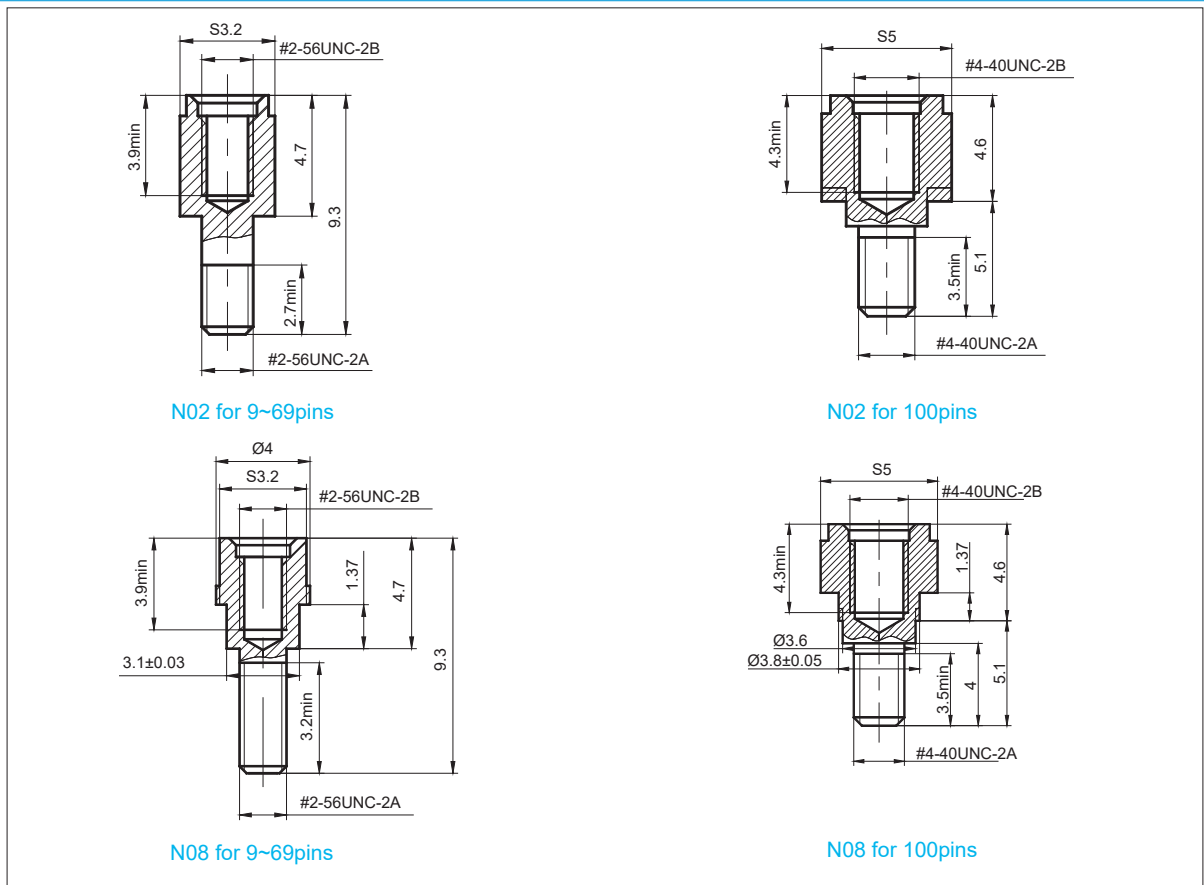
## How To Order

<b>Sample Part Number</b>	<b>R04A</b>	<b>-31</b>	<b>PI</b>	<b>FB</b>	<b>3</b>	<b>N02</b>	<b>G</b>
<b>Series:</b>	R04A—Micro-D Connectors for MIL-DTL-83513						
<b>Contact Number:</b>	9, 15, 21, 25, 31, 37, 51, 100pins						
<b>Contact Type:</b>	PI—Pin in Plug                      RH—Socket in Receptacle						
<b>Termination Type:</b>	FA Style and The PCB Layout is 2.54*2.54mm FB Style and The PCB Layout is 2.54*2.54mm						
<b>Tail Length:</b>	1—2.77mm                      2—3.56mm		3—4.37mm				
<b>Locking Hardware:</b>	N02—Locking Hardware Type (See page 10)		No Code—No Locking Hardware				
<b>Shell Material and Finish :</b>	G—Aluminum Shell, Cadmium Plating U—Aluminum Shell, Gold Plating		No Code—Aluminum Shell, Nickel Plating				

## Locking Hardware

Code	Feature	Panel Thickness	Stereogram	Outline Dimensions
N02	Hex Head	/		Please See Below
N08	1. Hex Head 2. Rear Panel Mounting Only	$1.5^{0}_{-0.10}$ mm		

## Outline Dimensions



## Tail Lengths

Tail Code	Tail Length	Recommend The Thickness Of PCB
1	2.77	1.2~2.2
2	3.56	2.0~3.0
3	4.37	2.8~3.8

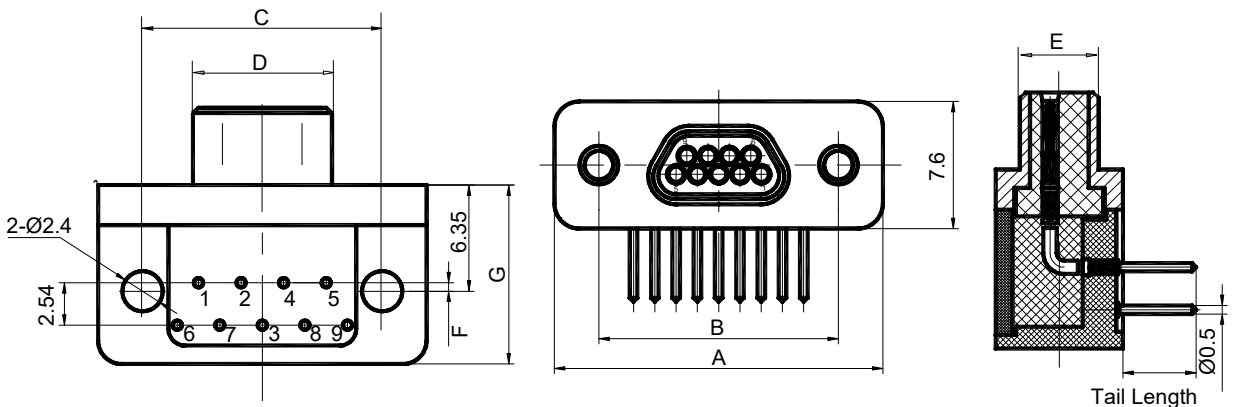
Remark: All dimensions are in mm.

# R04A Series Right Angle To PCB Connectors-FA Style

## Product Stereogram



## Outline Dimensions



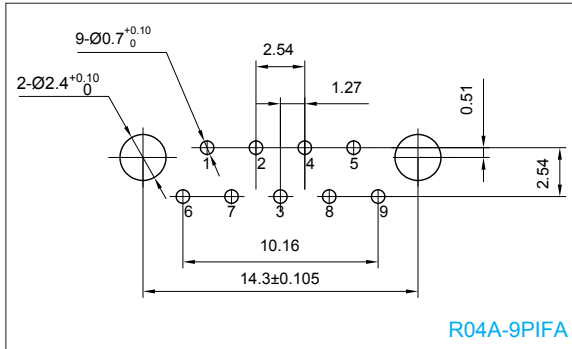
Part Number	A	B	C	D		E		F		G	
				PI	RH	PI	RH	PI	RH	PI	RH
R04A-9PI/RHFA	19.6	14.3	14.3	8.4	10.16	4.7	6.1	0.51	0.51	10.7	10.7
R04A-15PI/RHFA	23.5	18.2	18.2	12.3	14	4.7	6.1	3.05	3.05	10.7	10.7
R04A-21PI/RHFA	27.3	22	22	16.1	17.8	4.7	6.1	3.05	3.05	10.7	10.7
R04A-25PI/RHFA	29.8	24.5	24.5	18.6	20.3	4.7	6.1	3.05	3.05	10.7	10.7
R04A-31PI/RHFA	33.6	28.3	28.3	22.4	24.12	4.7	6.1	3.05	3.05	13.1	13.1
R04A-37PI/RHFA	37.4	32.1	32	26.3	27.9	4.7	6.1	3.05	3.05	13.1	13.1
R04A-51PI/RHFA	36.45	30.86	30.86	25.02	26.67	5.79	7.52	3.81	3.81	16.76	16.76

Remark: All dimensions are in mm.

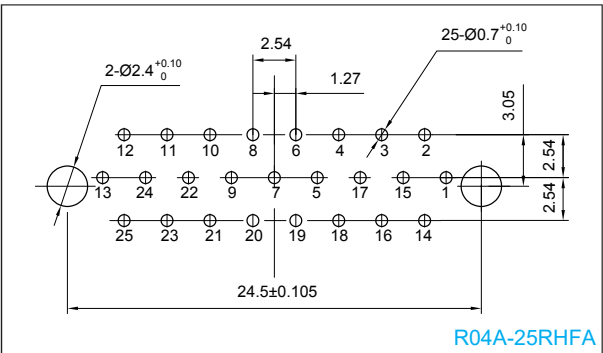
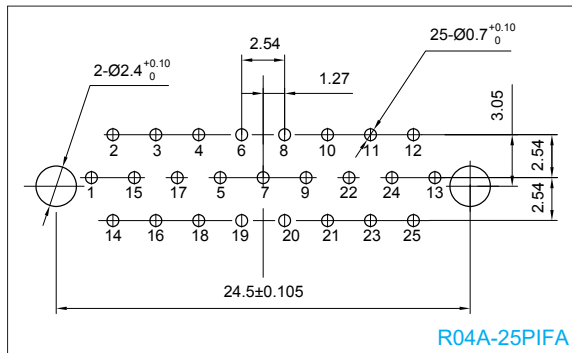
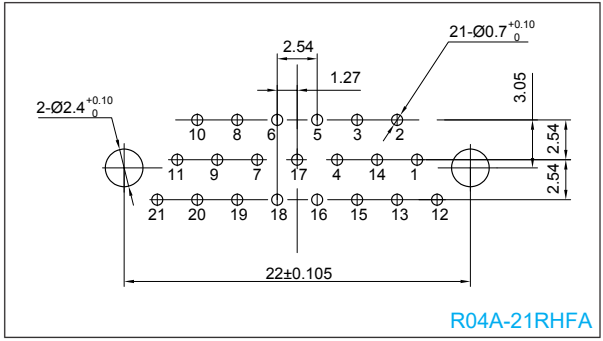
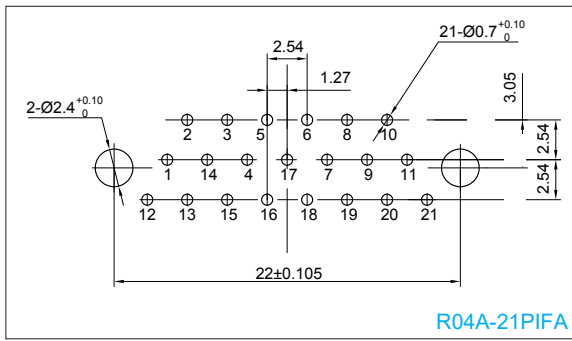
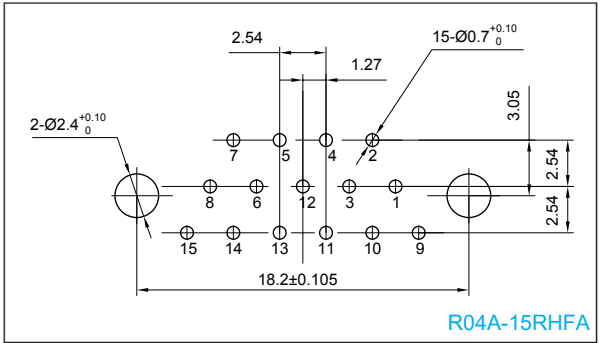
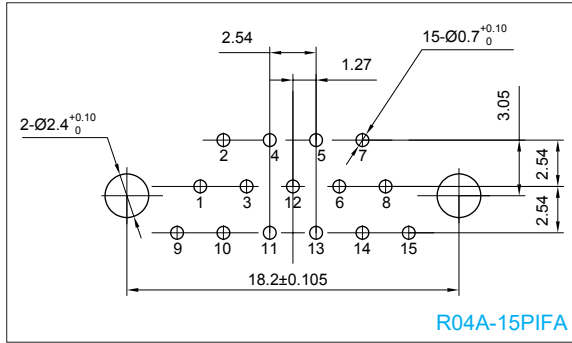
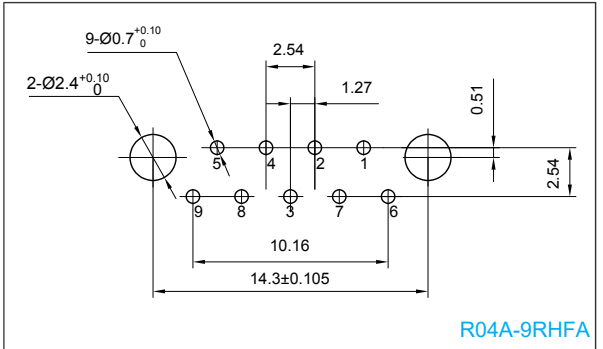


**R04A Series Right Angle to PCB Connectors FA Style-PCB Layout**

**Plug Connectors**



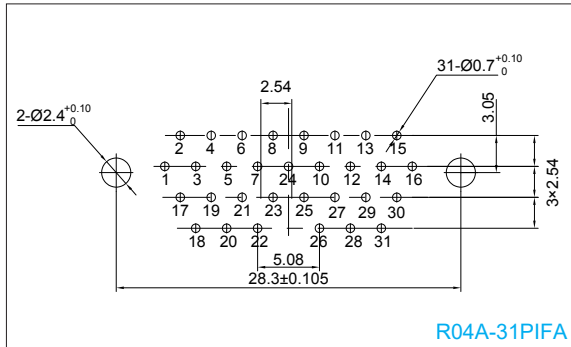
**Receptacle Connectors**



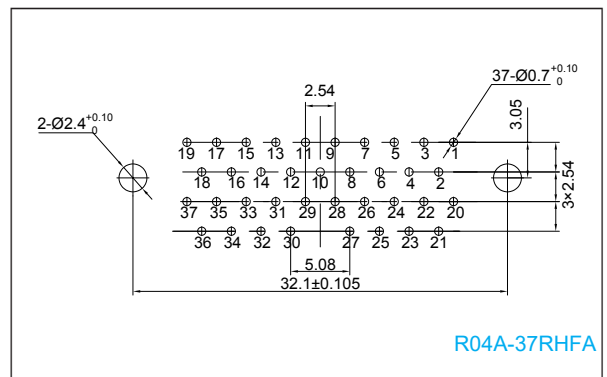
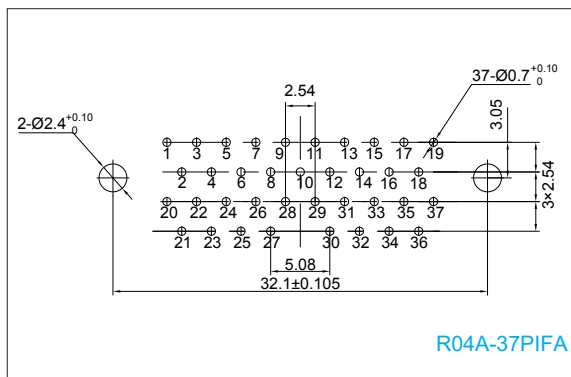
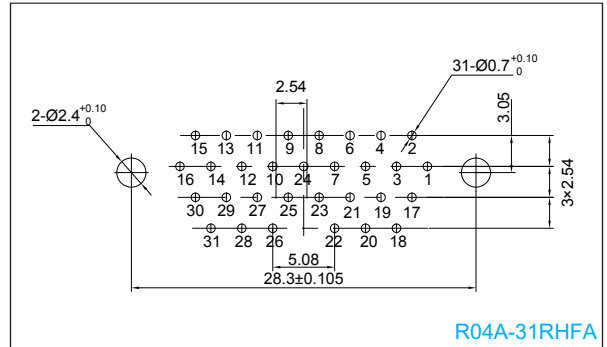
Remark: 1. All dimensions are in mm.  
2. View top side from PCB board.

## R04A Series Right Angle to PCB Connectors FA Style-PCB Layout

### Plug Connectors



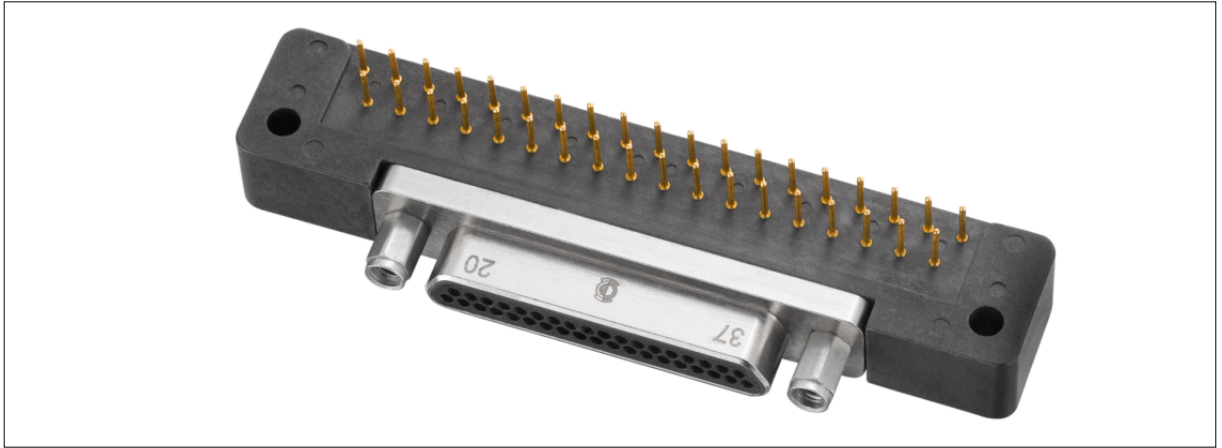
### Receptacle Connectors



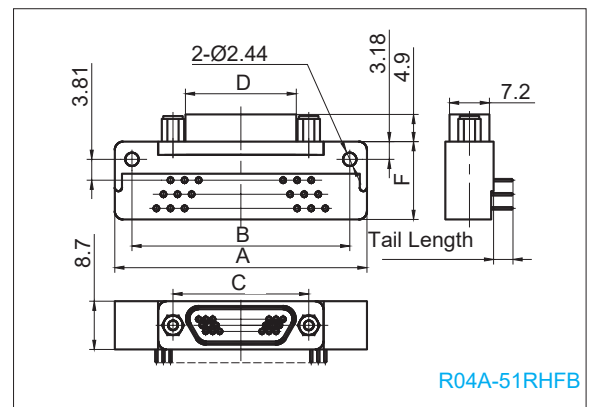
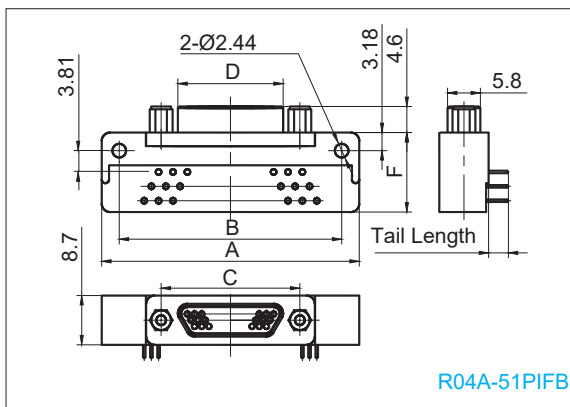
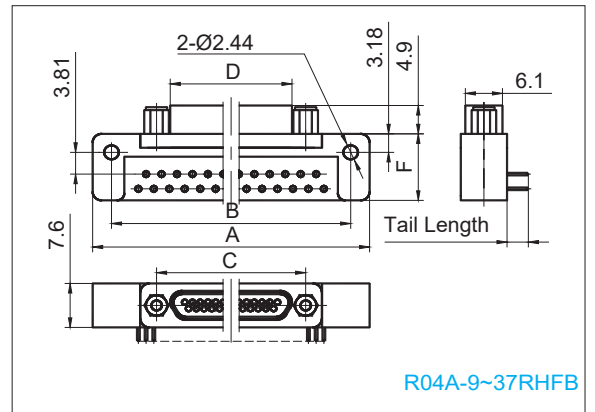
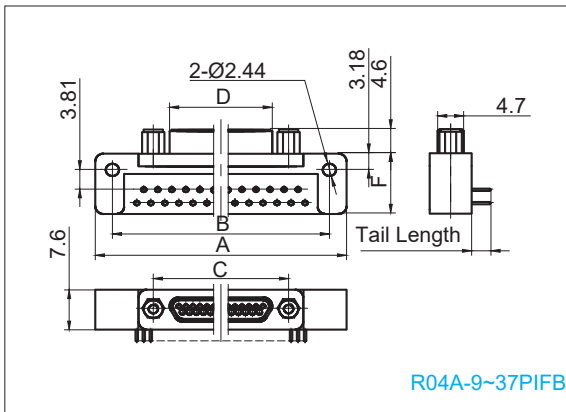
Remark: 1. All dimensions are in mm.  
2. View top side from PCB board.

# R04A Series Right Angle To PCB Connectors-FB Style

## Product Stereogram

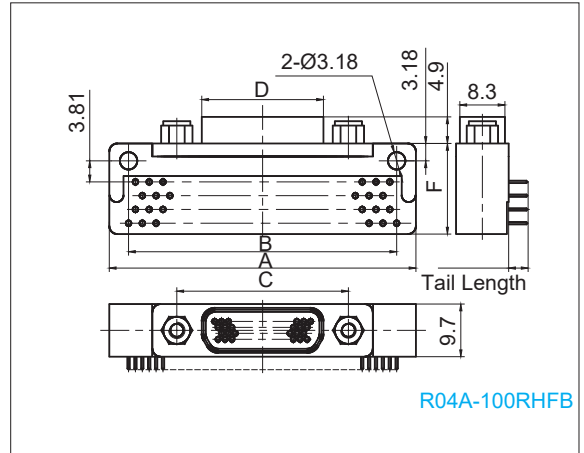
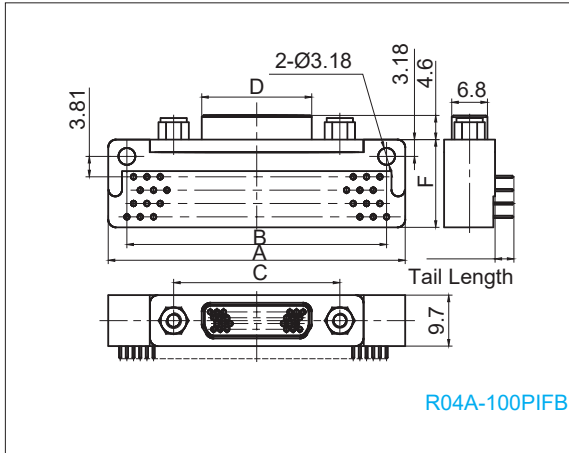


## Outline Dimensions



Remark 1. All dimensions are in mm.

## Outline Dimensions

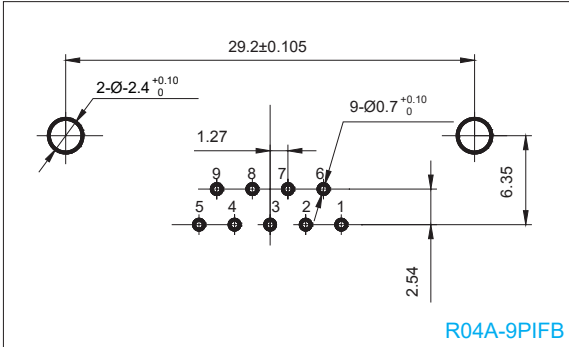


Part Number	Outline Dimensions				
	A	B	C	D	F
R04A-9PIFB	35.2	29.2	14.3	8.4	11.5
R04A-15PIFB	39	33	18.2	12.3	11.5
R04A-21PIFB	42.8	36.8	22	16.1	11.5
R04A-25PIFB	45.4	39.4	24.5	18.6	11.5
R04A-31PIFB	51.7	45.7	28.3	22.4	11.5
R04A-37PIFB	59.3	53.3	32.1	26.2	11.5
R04A-51PIFB	47.6	40.6	30.9	25	14.3
R04A-100PIFB	70.5	63.5	45.7	35.1	16.8
R04A-9RHFB	35.2	29.2	14.3	8.4	11.5
R04A-15RHFB	39	33	18.2	12.3	11.5
R04A-21RHFB	42.8	36.8	22	16.1	11.5
R04A-25RHFB	45.4	39.4	24.5	18.6	11.5
R04A-31RHFB	51.7	45.7	28.3	22.4	11.5
R04A-37RHFB	59.3	53.3	32.1	26.2	11.5
R04A-51RHFB	47.6	40.6	30.9	25	14.3
R04A-100RHFB	70.5	63.5	45.7	35.1	16.8

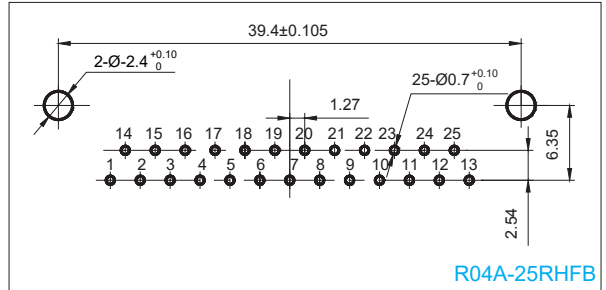
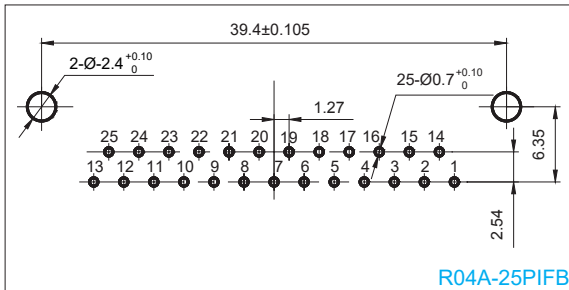
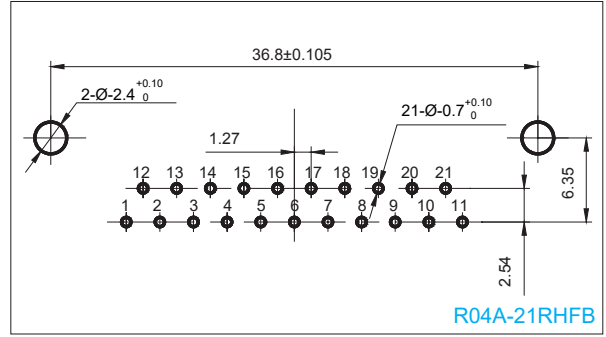
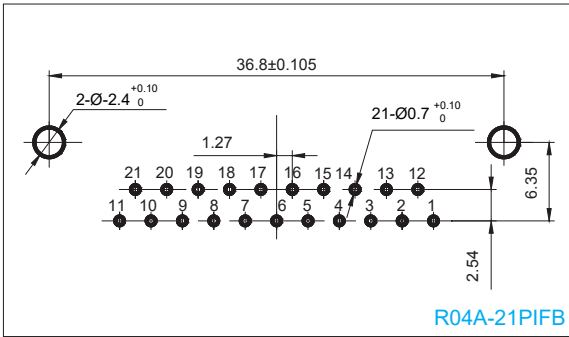
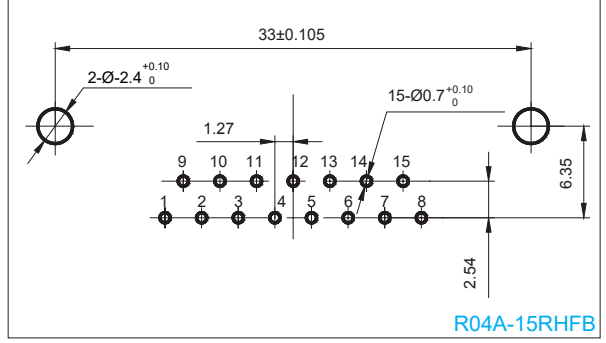
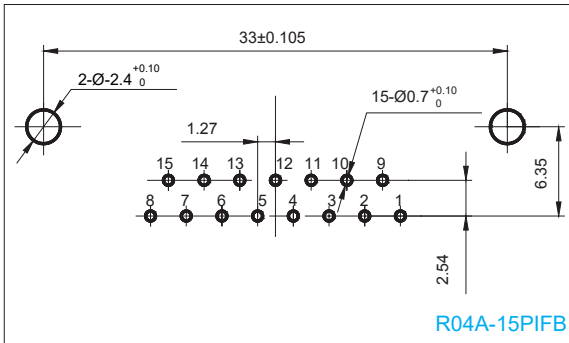
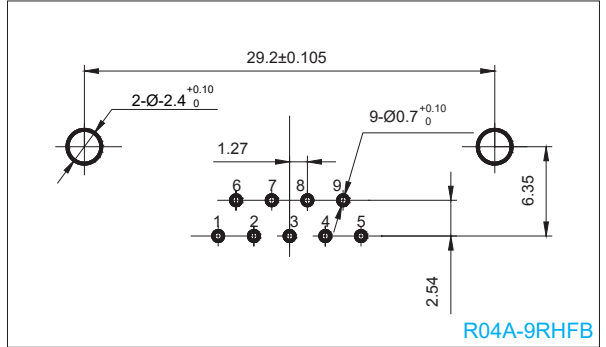
Remark: All dimensions are in mm.

**R04A Series Right Angle to PCB Connectors FB Style-PCB Layout**

**Plug Connectors**



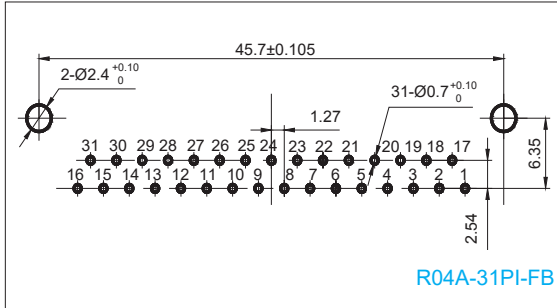
**Receptacle Connectors**



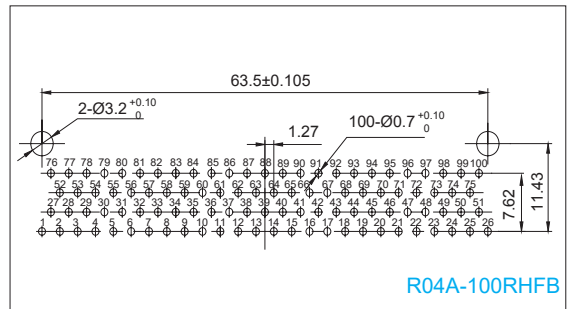
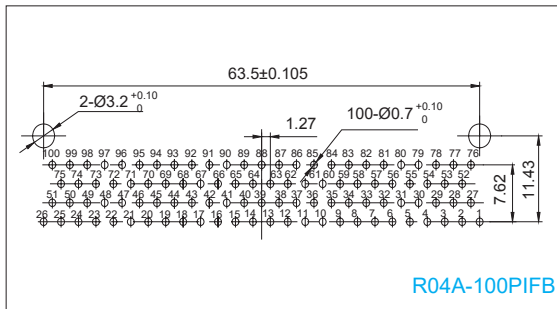
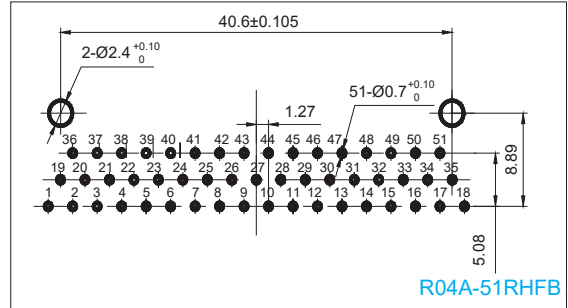
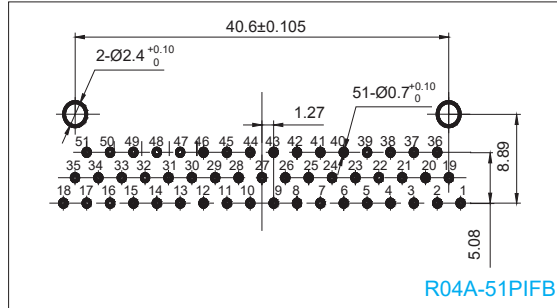
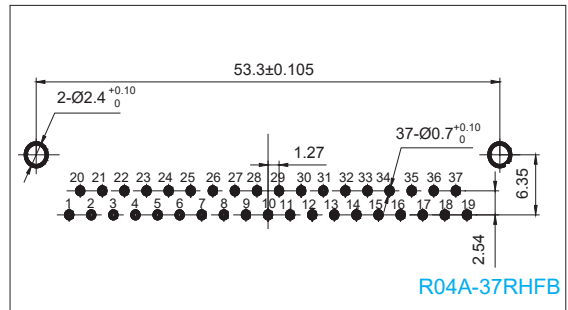
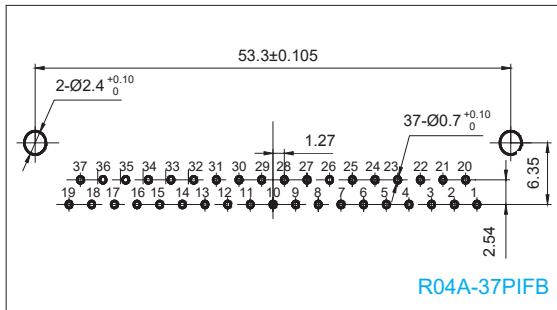
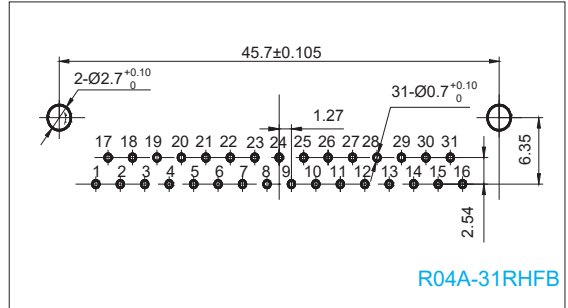
Remark: 1. All dimensions are in mm.  
2.View top side from PCB board.

## R04A Series Right Angle to PCB Connectors FB Style-PCB Layout

### Plug Connectors



### Receptacle Connectors



Remark: 1. All dimensions are in mm.  
2. View top side from PCB board.

