



## 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.

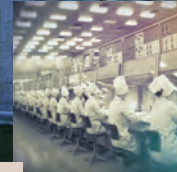


## Manufacture Equipment:

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

**SUNHYE**



# CONTENT

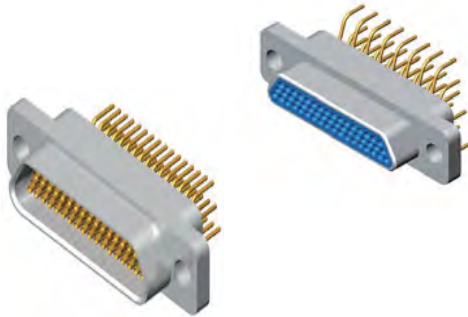


**MIL-DTL-83513 Micro-D Connectors**

**R04J Series Straight to PCB Connectors**

# MIL-DTL-83513 Micro-D Connectors

## R04J Series Straight to PCB Connectors



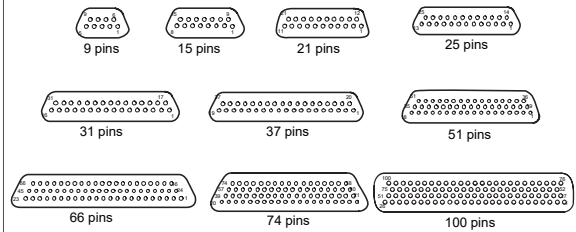
### Brief Introduction

- Micro-D Connectors
- Twist Pin Contacts, High Density
- Metal Shell, Nickel or Cadmium Plating
- Straight 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 mean square value of total acceleration 23.1G
- Shock: 735m/s<sup>2</sup> 11sm
- Rated Current: 3A
- Contact Resistance: ≤10mΩ
- Insulation Resistance: ≥5000MΩ
- Dielectric Strength: 800V
- Durability: 500 times

### Contact Arrangements



### How To Order

<b>Sample Part Number</b>	<b>R04J</b>	<b>-25</b>	<b>PI</b>	<b>S</b>	<b>4</b>	<b>Q5</b>	<b>G</b>	<b>-J</b>
<b>Series:</b>	R04J—Standard Type R04JA—Fast Lock Type							
<b>Contact Number:</b>	9, 15, 21, 25, 31, 37, 51, 66, 74, 100pins							
<b>Contact Type :</b>	PI—Pin in Plug      RH—Socket in Receptacle							
<b>Tail Termination Type:</b>	S—Straight to PCB							
<b>Tail Length :</b>	3—6.7mm      4—7.2mm 8—8mm      No Code—Standard Type							
<b>Locking Hardware Type:</b>	Q5—Locking Hardware Type (See page 2)      No Code—No Locking Hardware							
<b>Shell Material and Finish :</b>	G—Aluminum Shell, Cadmium Plating      No Code—Aluminum Shell, Nickel Plating							
<b>PCB Layout :</b>	J—1.27*2.54mm      No Code—2.54*2.54mm							



**Free End Locking Hardware For R04J Series Straight To PCB Connectors**

Type	A	B	Outline Dimensions	Assembly Picture	Matched with Locking Hardware
W	M2-6h	7.1			Q, Q0, Q2, Q3, Q4, Q5, Q7, Q8, Q9, Q10, Q11, Q14, Q15, Q17, Q23, Q25, Q29, Q32, Q35, Q36, Q37, Q41, Q42, Q43, Q45, Q46
W8	#2-56UNC-2A	7.1			Q1
W7	M2-6h	7.1			Q, Q0, Q2, Q3, Q4, Q5, Q7, Q8, Q9, Q10, Q11, Q14, Q15, Q17, Q23, Q25, Q29, Q32, Q35, Q36, Q37, Q41, Q42, Q43, Q45, Q46
N	M2-6h				Q, Q0, Q2, Q3, Q4, Q5, Q7, Q8, Q9, Q10, Q11, Q14, Q15, Q17, Q23, Q25, Q29, Q32, Q35, Q36, Q37, Q41, Q42, Q43, Q45, Q46
N1	#2-56UNC-2A				Q1

**Fixed End Locking Hardware For R04J Series Straight To PCB Connectors**

Type	A	B	C	PCB Thickness	Outline Dimensions	Assembly Picture	Matched with Locking Hardware
Q5	5.7	5.9	18.6	1.6~2.5			W, W7, W9, N Note: Use with front panel mounting straight to PCB connectors
Q10	8	8.4	20.5	1.6~2.5			
Q25	5.7	5.9	20.5	1.6~2.5			
	8	5.9	20.5	1.6~2.5			
Q23	5.7	5.9	17.8	1.6			
Q32	2.7	2		1.6~2.5			W, W7, W9, N Note: Use with rear panel mounting straight to PCB connectors
Q41	3.2	1.5		1.6~2.5			
Q17	5.7			1.6~3			W, W7, W9, N
	7.2			1.6~4.5			
V				≤2.5			Note: No need to lock with free end locking hardware

Remark: 1. Fixed end locking hardware apply to fix the connectors on the mounting panels or the PCB. Most fixed end locking hardware can be mated with free end locking hardware, but a little can not. (eg. V)  
2. All dimensions are in mm.

## R04J Series Straight To PCB Connectors - Basic Type



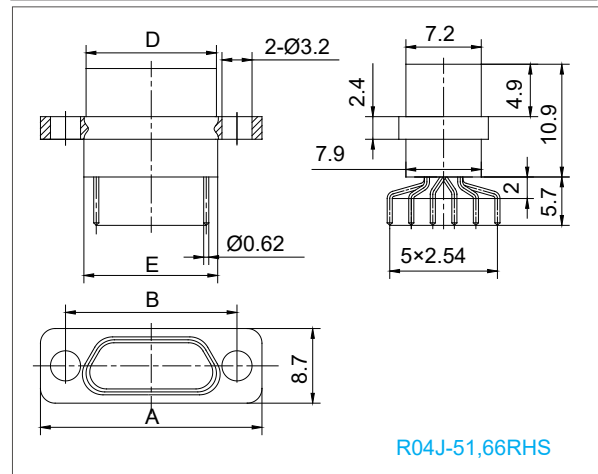
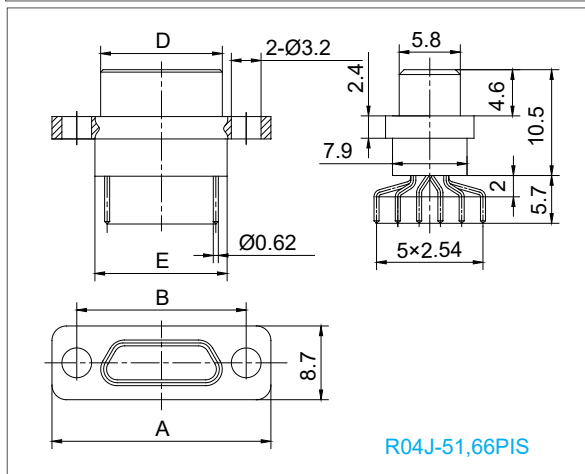
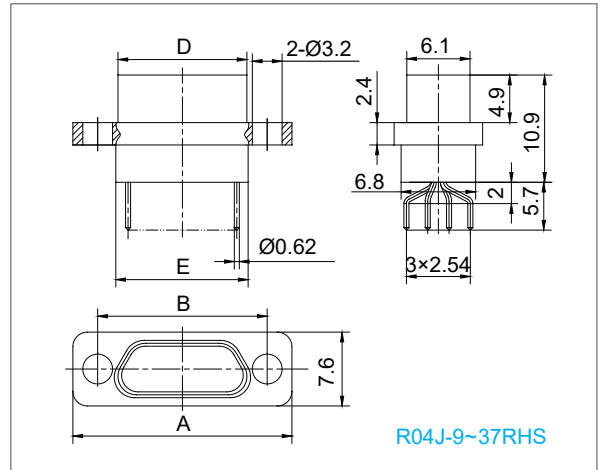
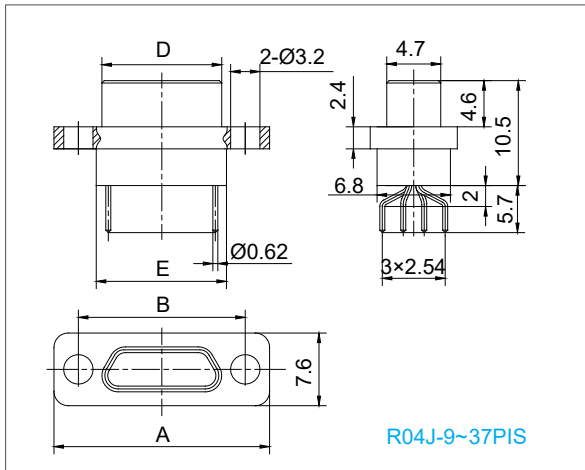
Plug:PIS



Receptacle:RHS

- **Shell Plating:** Nickel or Cadmium
- **PCB Layout:** 2.54\*2.54mm
- **Contacts:**  
R04J- 9, 15, 21, 25, 31, 37, 51, 66PIS/RHS

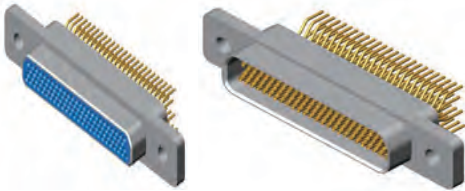
### Outline Dimensions



Part Number	A	B	D		E
			PIS	RHS	
R04J-9PIS/RHS	19.6	14.3	8.3	9.8	9.9
R04J-15PIS/RHS	23.5	18.2	12.3	13.7	13.8
R04J-21PIS/RHS	27.4	22	16	17.4	17.6
R04J-25PIS/RHS	29.8	24.5	18.6	20	20.2
R04J-31PIS/RHS	33.6	28.3	22.4	23.8	24
R04J-37PIS/RHS	37.4	32.2	26.3	27.7	27.8
R04J-51PIS/RHS	36.4	30.86	25	26.5	26.6
R04J-66PIS/RHS	42.9	37.3	31.4	32.9	33

Remark: All dimensions are in mm.

## R04J Series Straight To PCB Connectors - Type J

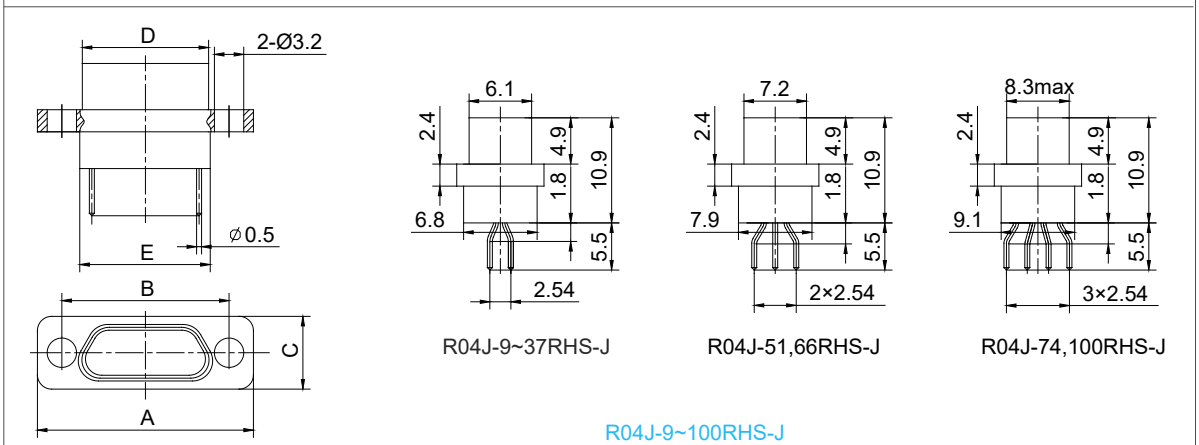
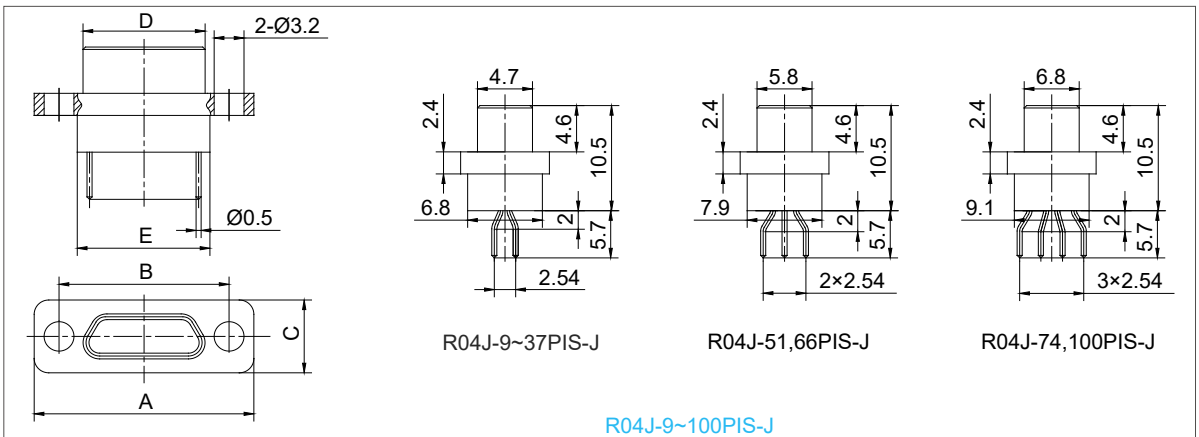


Plug:PIS-J

Receptacle:RHS-J

- **Shell Plating:** Nickel or Cadmium
- **PCB Layout:** 1.27\*2.54mm
- **Contacts:**  
R04J- 9, 15, 21, 25, 31, 37, 51, 66, 74, 100PI/RHS-J

### Outline Dimensions

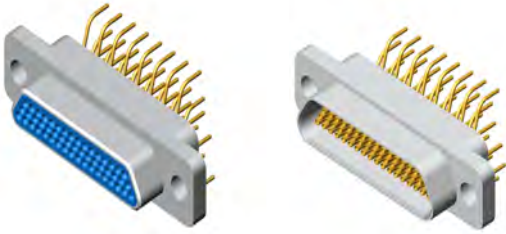


Part number	A	B	C	D		E
				PIS-J	RHS-J	
R04J-9PI/RHS-J	19.6	14.3	7.6	8.3	9.8	9.9
R04J-15PI/RHS-J	23.5	18.2	7.6	12.3	13.7	13.8
R04J-21PI/RHS-J	27.4	22	7.6	16	17.4	17.6
R04J-25PI/RHS-J	29.8	24.5	7.6	18.6	20	20.2
R04J-31PI/RHS-J	33.6	28.3	7.6	22.4	23.8	24
R04J-37PI/RHS-J	37.4	32.2	7.6	26.3	27.7	27.8
R04J-51PI/RHS-J	36.4	30.86	8.7	25	26.5	26.6
R04J-66PI/RHS-J	42.9	37.3	8.7	31.4	32.9	33
R04J-74PI/RHS-J	38.8	33.5	9.7	27.5	29	29.1
R04J-100PI/RHS-J	54.7	45.7	9.7	35	36.6	36.6

Remark: All dimensions are in mm.



## R04J Series Straight To PCB Connectors Basic Type--PCB Tail Length

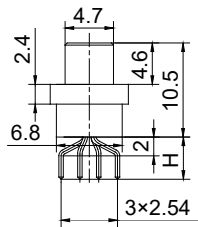
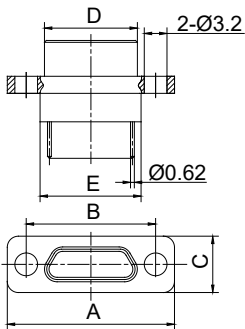


Plug: PIS3/S4/S8

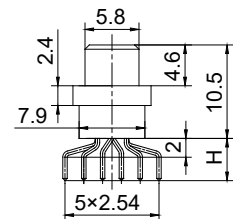
Receptacle: RHS3/S4/S8

- **Shell Plating:** Nickel or Cadmium
- **PCB Layout:** 2.54\*2.54mm
- **Contacts:**  
R04J- 9, 15, 21, 25, 31, 37, 51PIS4/S8  
R04J- 9, 15, 21, 25, 31, 37, 51RHS3/S4
- **PCB Tail Length:** 6.7mm, 7.2mm, 8mm

### Outline Dimensions

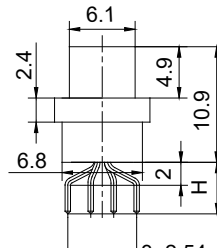
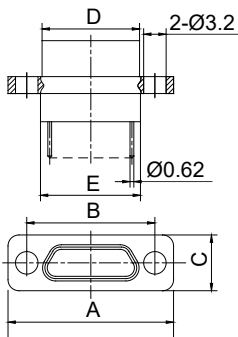


R04J-9~37PIS4/S8

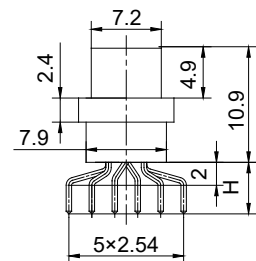


R04J-51PIS4/S8

R04J-9~51PIS4/S8



R04J-9~37RHS3/S4



R04J-51RHS3/S4

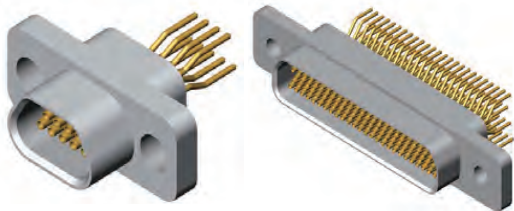
R04J-9~51RHS3/S4

Pin Count	A	B	C	D	E	H		
						S3	S4	S8
9	19.6	14.3	7.6	8.3	9.9	6.7	7.2	8
15	23.5	18.2	7.6	12.3	13.8	6.7	7.2	8
21	27.4	22	7.6	16	17.6	6.7	7.2	8
25	29.8	24.5	7.6	18.6	20.2	6.7	7.2	8
31	33.6	28.3	7.6	22.4	24	6.7	7.2	8
37	37.4	32.2	7.6	26.3	27.8	6.7	7.2	8
51	36.4	30.86	8.7	25	26.6	6.7	7.2	Without

Remark: All dimensions are in mm.



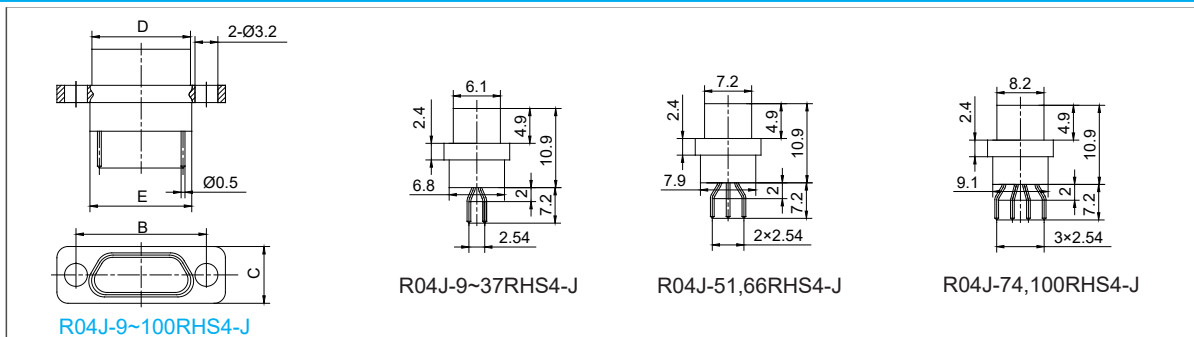
## R04J Series Straight To PCB Connectors Type J--PCB Tail Length



Receptacle: RHS4-J

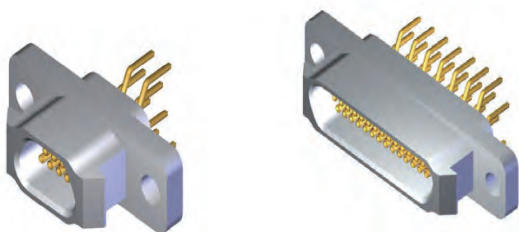
- **Shell Plating:** Nickel or Cadmium
- **PCB Layout:** 1.27\*2.54mm
- **PCB Tail Length:** 7.2mm
- Receptacle Connectors
- **Contact:**  
R04J-9, 15, 21, 25, 31, 37, 51, 66, 74, 100RHS4-J

### Outline Dimensions



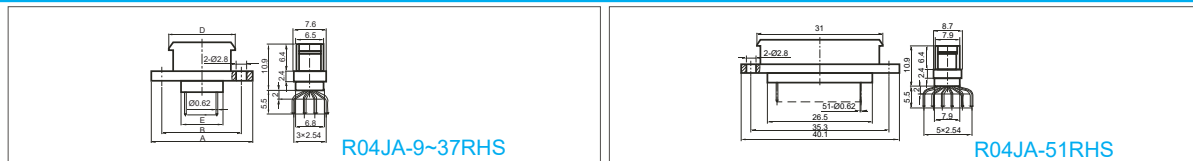
Part Number	A	B	C	D	E
R04J-9RHS4-J	19.6	14.3	7.6	9.8	9.9
R04J-15RHS4-J	23.5	18.2	7.6	13.7	13.8
R04J-21RHS4-J	27.4	22	7.6	17.4	17.6
R04J-25RHS4-J	29.8	24.5	7.6	20	20.2
R04J-31RHS4-J	33.6	28.3	7.6	23.8	24
R04J-37RHS4-J	37.4	32.2	7.6	27.7	27.8
R04J-51RHS4-J	36.4	30.86	8.7	26.5	26.6
R04J-66RHS4-J	42.9	37.3	8.7	32.9	33
R04J-74RHS4-J	38.8	33.5	9.7	29	29.1
R04J-100RHS4-J	54.7	45.7	9.7	36.6	36.6

## R04J Series Straight To PCB Connectors - Fast Lock Type R04JA



- **Shell Plating:** Nickel or Cadmium
- **PCB Layout:** 2.54\*2.54mm
- With Fast Lock Function
- Receptacle Connectors
- **Contacts:**  
R04JA- 9, 15, 21, 25, 31, 37, 51RHS

### Outline Dimensions



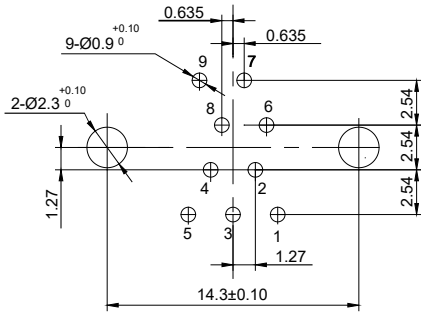
Part Number	A	B	D	E
R04JA-9RHS	23.4	18.6	14.8	9.8
R04JA-15RHS	27.4	22.6	18.3	13.8
R04JA-21RHS	31.1	26.3	22	17.5
R04JA-25RHS	33.7	28.9	24.6	20.1
R04JA-31RHS	37.5	32.7	28.4	24.1
R04JA-37RHS	41.4	36.6	32.3	27.8

Remark: All dimensions are in mm.

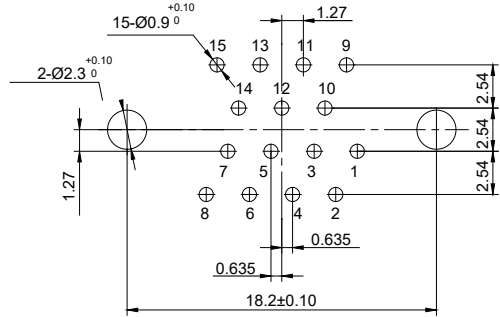


## R04J Series Straight to PCB Connectors Basic Type--PCB Layout

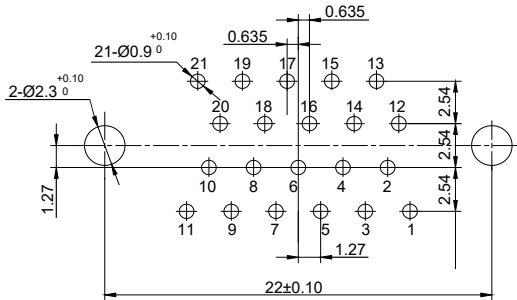
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 2.54\*2.54mm
- Plug Connectors: R04J-9~66PIS/S4/S8



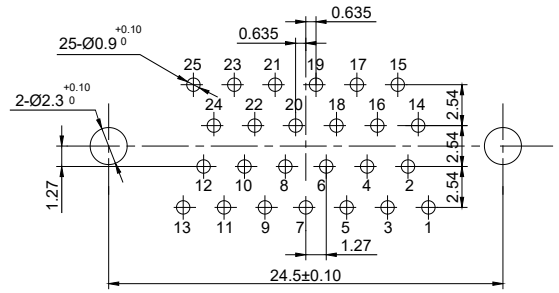
R04J-9PIS/S4/S8



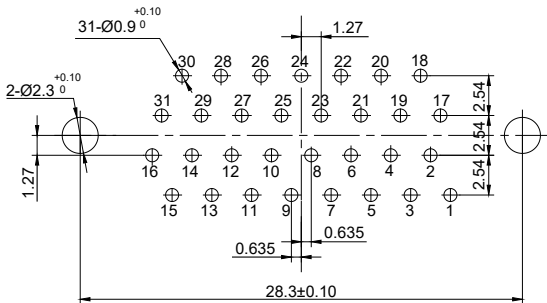
R04J-15PIS/S4/S8



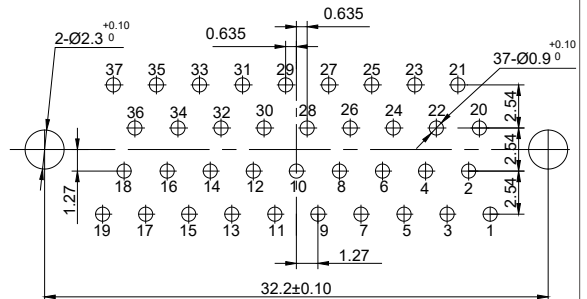
R04J-21PIS/S4/S8



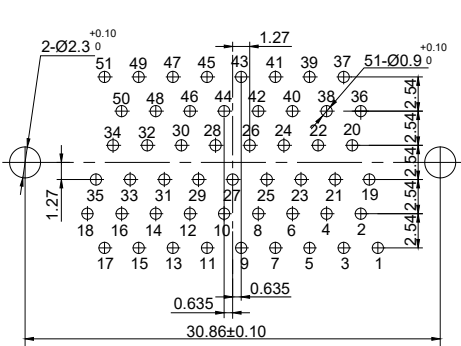
R04J-25PIS/S4/S8



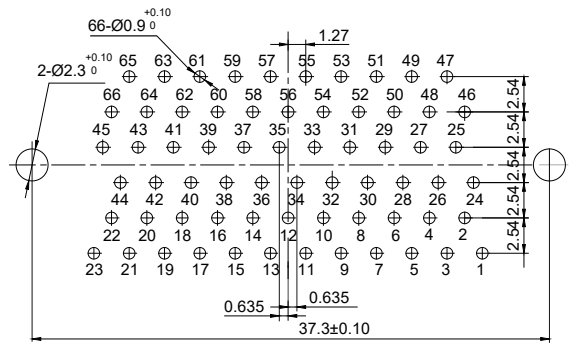
R04J-31PIS/S4/S8



R04J-37PIS/S4/S8



R04J-51PIS/S4/S8



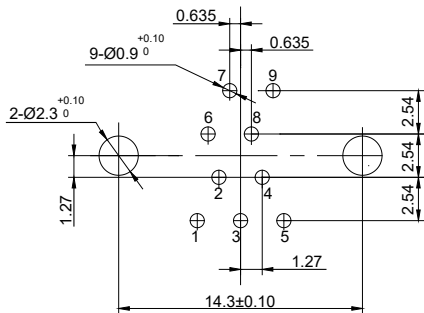
R04J-66PIS/S4/S8

Remark: All dimensions are in mm.

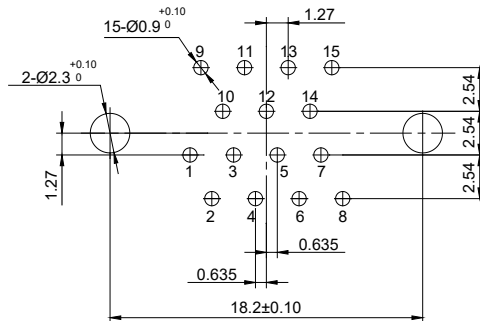


## R04J Series Straight to PCB Connectors Basic Type--PCB Layout

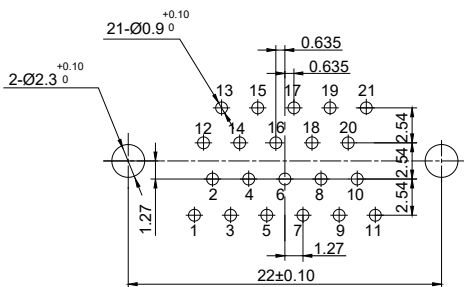
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 2.54\*2.54mm
- Receptacle Connectors: R04J-9~66RHS/S3/S4



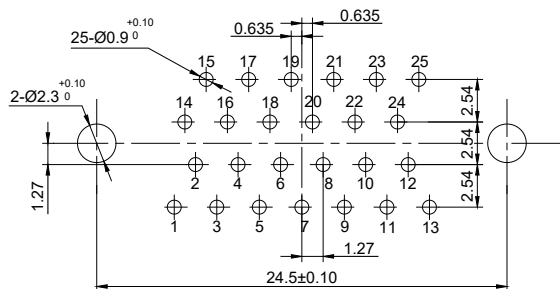
R04J-9RHS/S3/S4



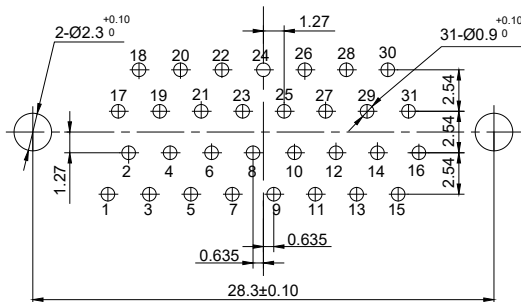
R04J-15RHS/S3/S4



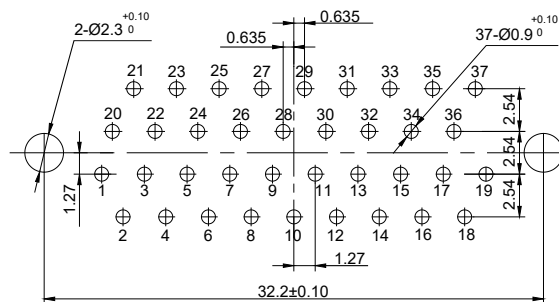
R04J-21RHS/S3/S4



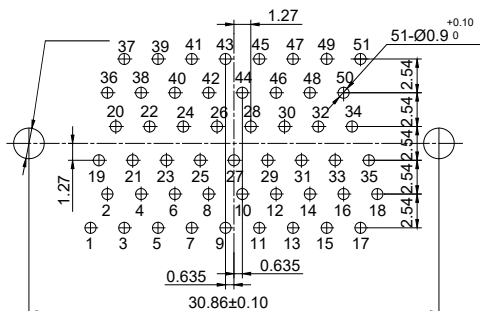
R04J-25RHS/S3/S4



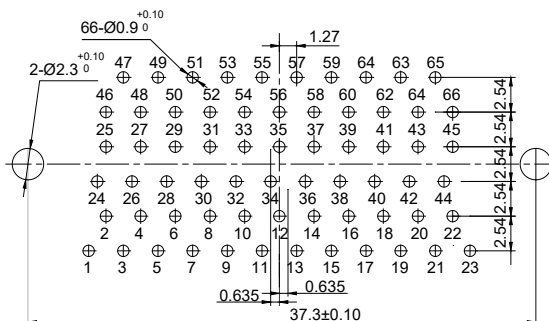
R04J-31RHS/S3/S4



R04J-37RHS/S3/S4



R04J-51RHS/S3/S4



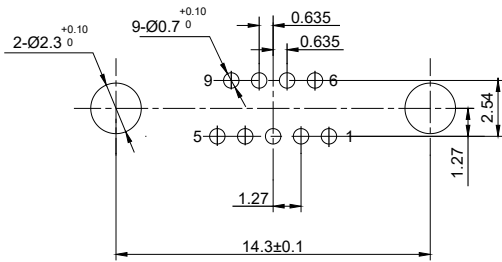
R04J-66RHS/S3/S4

Remark: All dimensions are in mm.

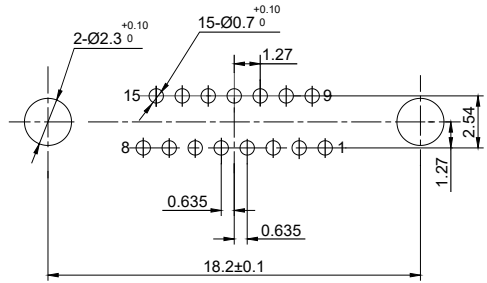


## R04J Series Straight to PCB Connectors Type J--PCB Layout

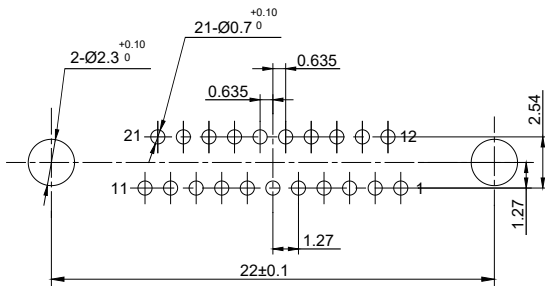
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 1.27\*2.54mm
- Plug Connectors: R04J-9~100PIS-J



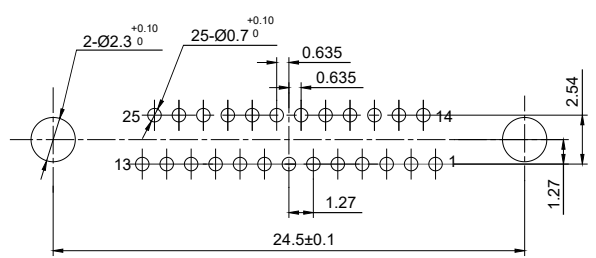
R04J-9PIS-J



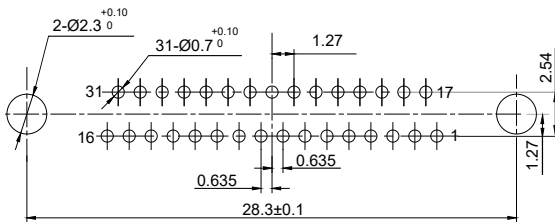
R04J-15PIS-J



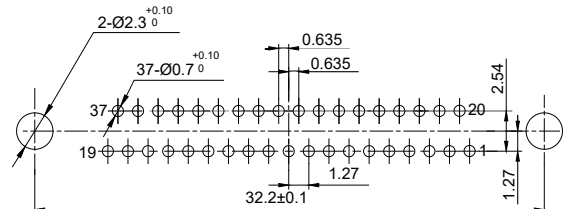
R04J-21PIS-J



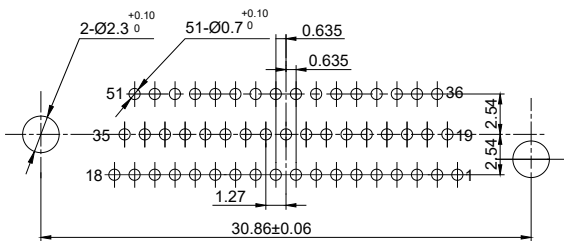
R04J-25PIS-J



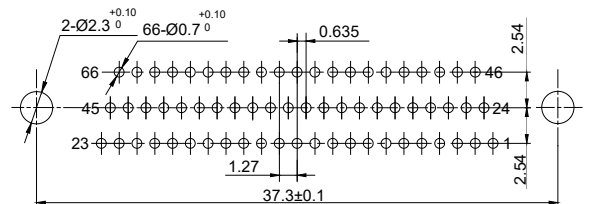
R04J-31PIS-J



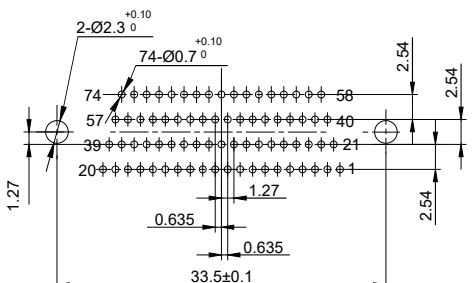
R04J-37PIS-J



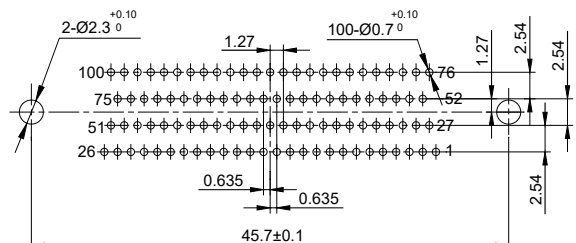
R04J-51PIS-J



R04J-66PIS-J



R04J-74PIS-J



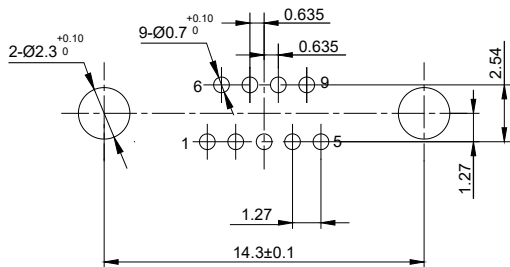
R04J-100PIS-J

Remark: All dimensions are in mm.

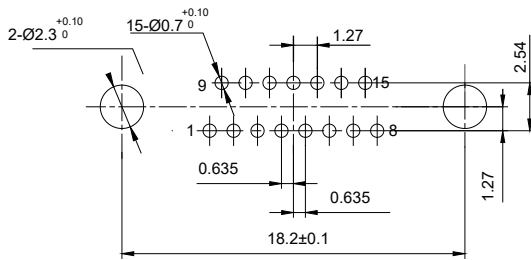


### R04J Series Straight to PCB Connectors Type J--PCB Layout

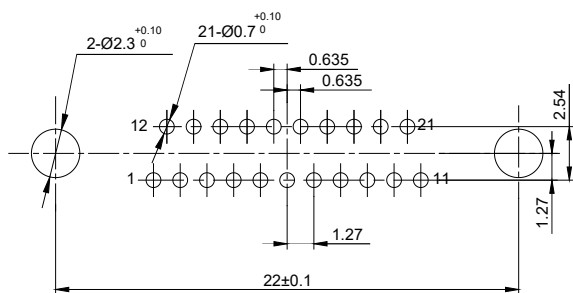
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 1.27\*2.54mm
- Receptacle Connectors: R04J-9~100RHS/S4-J



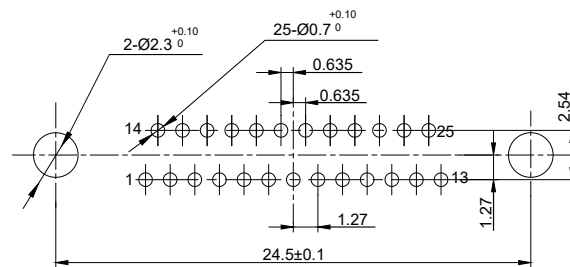
R04J-9RHS-J, RHS4-J



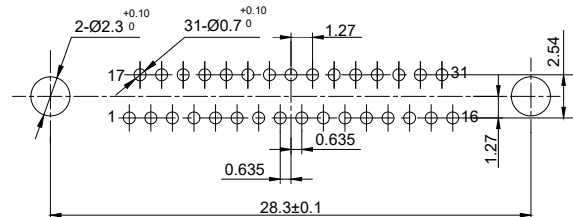
R04J-15RHS-J, RHS4-J



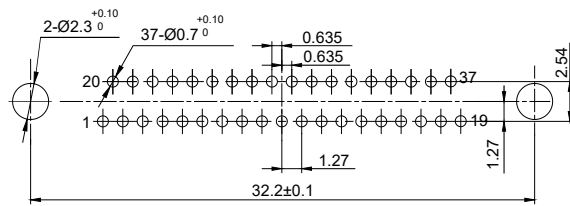
R04J-21RHS-J, RHS4-J



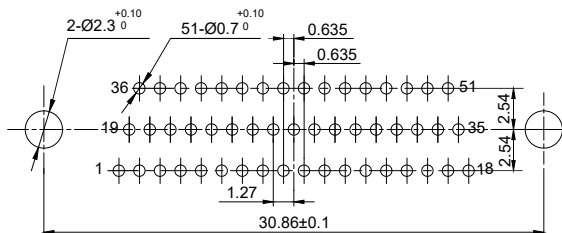
R04J-25RHS-J, RHS4-J



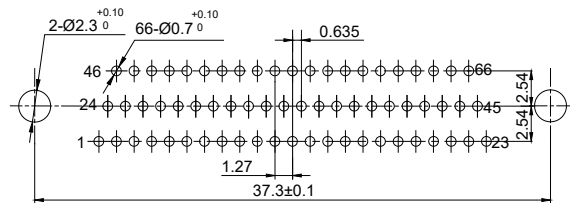
R04J-31RHS-J, RHS4-J



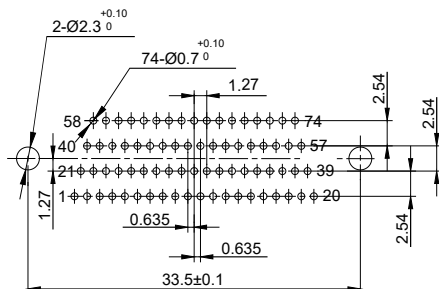
R04J-37RHS-J, RHS4-J



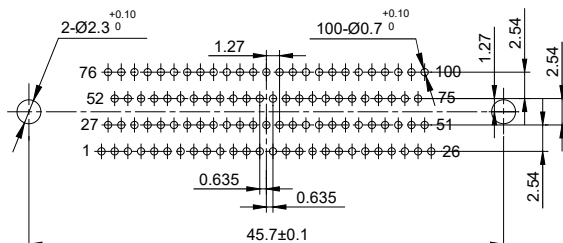
R04J-51RHS-J, RHS4-J



R04J-66RHS-J, RHS4-J



R04J-74RHS-J, RHS4-J



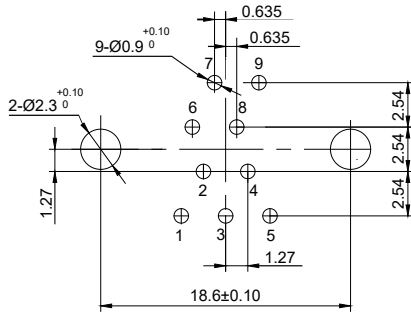
R04J-100RHS-J, RHS4-J

Remark: All dimensions are in mm.

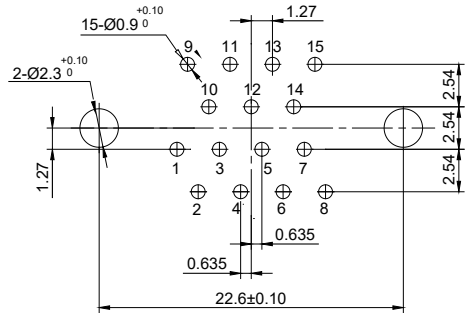


## R04J Series Straight to PCB Connectors Fast lock Type R04JA--PCB Layout

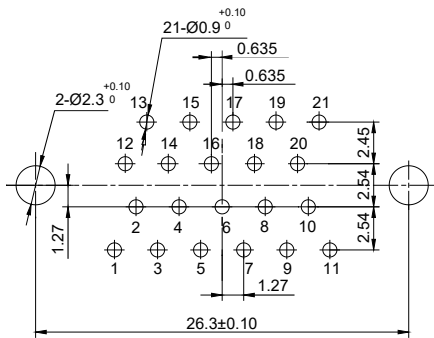
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 2.54\*2.54mm
- Receptacle Connectors: R04JA-9~51RHS



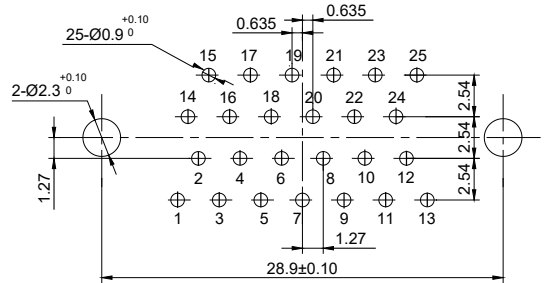
R04JA-9RHS



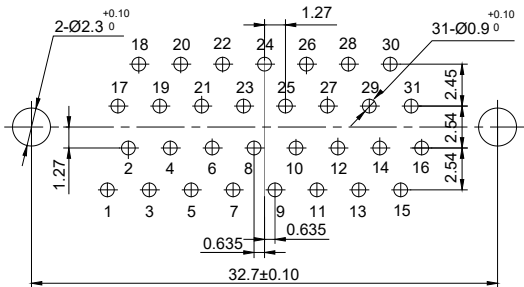
R04JA-15RHS



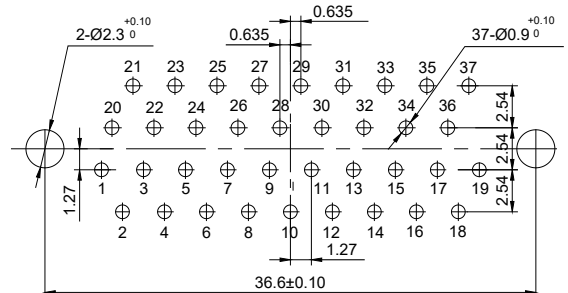
R04JA-21RHS



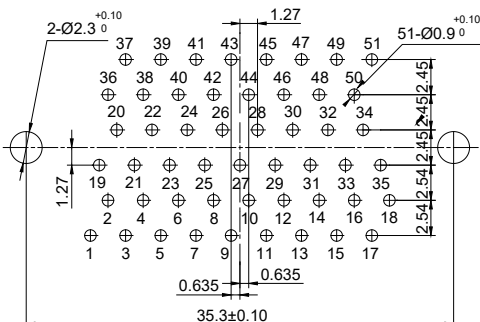
R04JA-25RHS



R04JA-31RHS



R04JA-37RHS

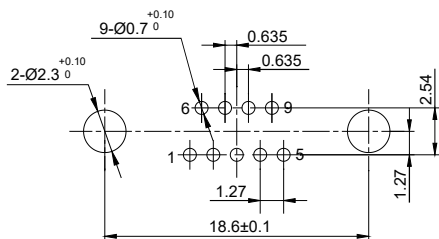


R04JA-51RHS

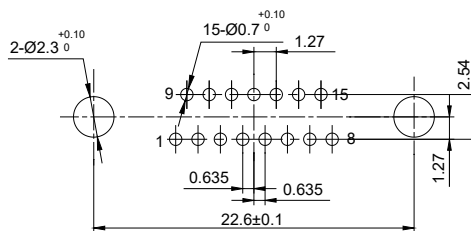
Remark: All dimensions are in mm.

## R04J Series Straight to PCB Connectors Fast lock Type R04JA--PCB Layout

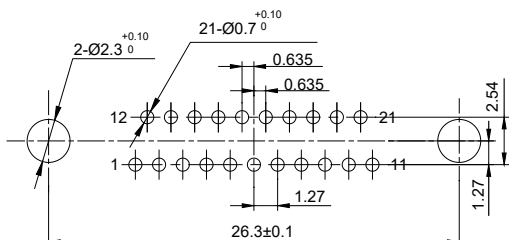
- Patterns Shown are for Connectors Mounting Side of PC Board
- PCB Layout: 1.27\*2.54mm
- Receptacle Connectors: R04JA-9~100RHS-J



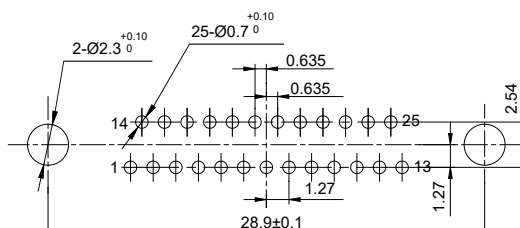
R04JA-9RHS-J



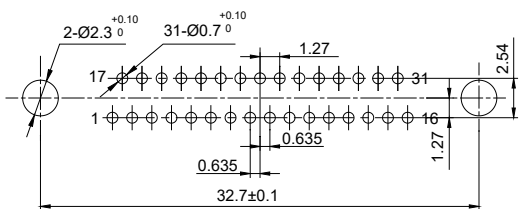
R04JA-15RHS-J



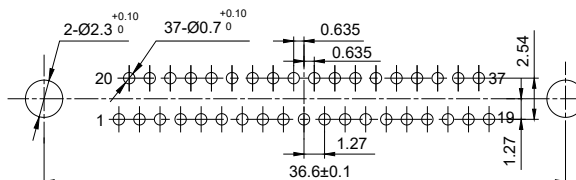
R04JA-21RHS-J



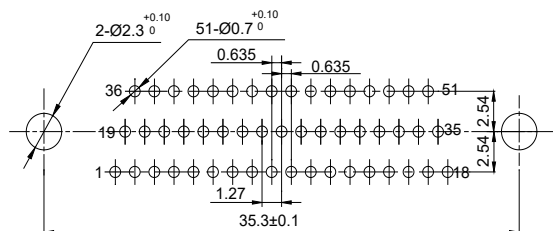
R04JA-25RHS-J



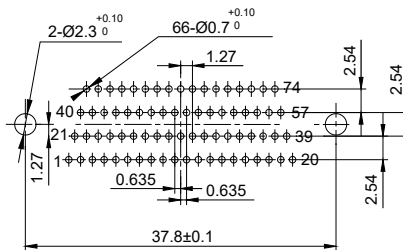
R04JA-31RHS-J



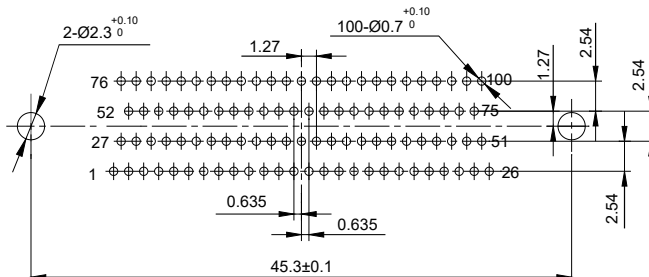
R04JA-37RHS-J



R04JA-51RHS-J



R04JA-74RHS-J



R04JA-100RHS-J

Remark: All dimensions are in mm.



