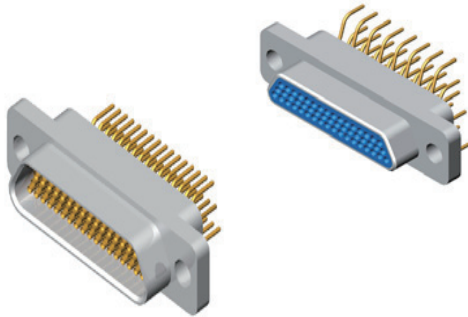


MIL-DTL-83513 Micro D-Sub Connectors

R04J Series Straight to PCB Type



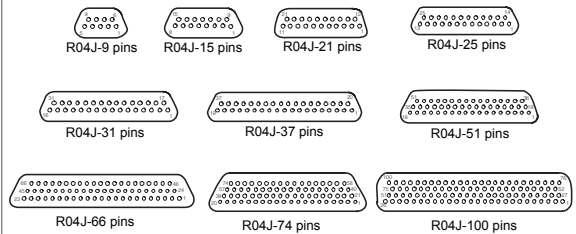
Introduction

- Micro D-sub connectors
- Twist pin contact, high density interconnection
- Metal shell, plated nickel or cadmium
- Straight to PCB type
- Meet MIL-DTL-83513

Specification

- Environment temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Vibration: $10\text{Hz} \sim 2000\text{Hz}$, 196m/s^2
- Random vibration: Power spectrum density $0.4\text{G}^2/\text{Hz}$
root mean square value of total acceleration 23.1G
- Shock: 735m/s^2 11sm
- Rated current: 3A
- Contact resistance: $\leq 10\text{m}\Omega$
- Insulation resistance: $\geq 5000\text{M}\Omega$
- Dielectric strength: 800V
- Durability: 500 times

Contact Layout



How to Order Straight to PCB Connector

Sample part number	R04J	— 25	RH	S	Q5	4	— J
Series:	R04J—standar type R04JA—fast lock type						
Contact number:	9, 15, 21, 25, 31, 37, 51, 66, 74, 100pins						
Contact type :	PI—pin in plug RH—socket in receptacle						
Tail termination type:	S—straight to PCB						
Locking component type:	blank—without Q5— locking component type,please see page2						
Shell material and finish :	Blank—Aluminum shell,finish nickel G—Aluminum shell,finish cadmium						
Tail lengty :	3—6.7mm 4—7.2mm 8—8mm blank—standard type						
PCB layout :	J—1.27*2.54mm Blank—2.54*2.54mm						



R04J series free end locking component

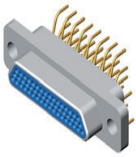
Type	A	B	Outline dimension	Assembly picture	Matched with locking component
W	M2-6h	7.1			Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46
W8	#2-56UNC-2A	7.1			Q1
W7	M2-6h	7.1			Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46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

R04J series fixed end locking component for straight to PCB

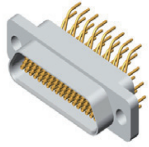
Type	A	B	C	PCB thickness	Outline dimension	Assembly picture	Matched with locking component
Q5	5.7	5.9	18.6	1.6~2.5			W, W7, W9, N Note: These Kinds components just suitable for front panel mounting
Q10	8	8.4	20.5	1.6~2.5			
Q25	5.7	5.9	20.5	1.6~2.5			
	8	5.9	20.5	1.6~2.5			
Q23	5.7	5.9	17.8	1.6			
Q32	2.7	2		1.6~2.5			W, W7, W9, N Note: These Kinds components just suitable for rear panel mounting
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			Not need to lock with locking component of free end

Remark: 1. Fixed end locking component apply to fix the connector on the mounting panel or the PCB. Most fixed end locking component can mate with free end locking component. Few fixed end locking component can't mate with free end locking component.(eg.: Q44)
2. All dimensions are in mm

R04J series basic type inserting to PCB--straight to PCB S type



Plug:PIS



Receptacle:RHS

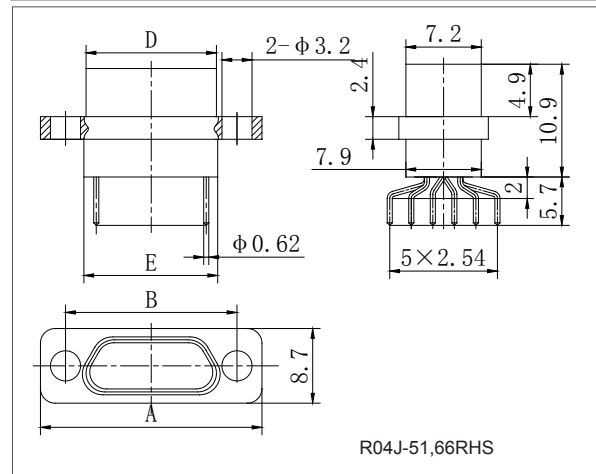
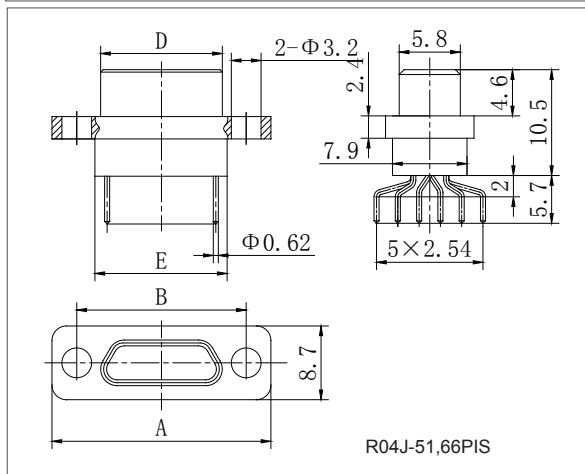
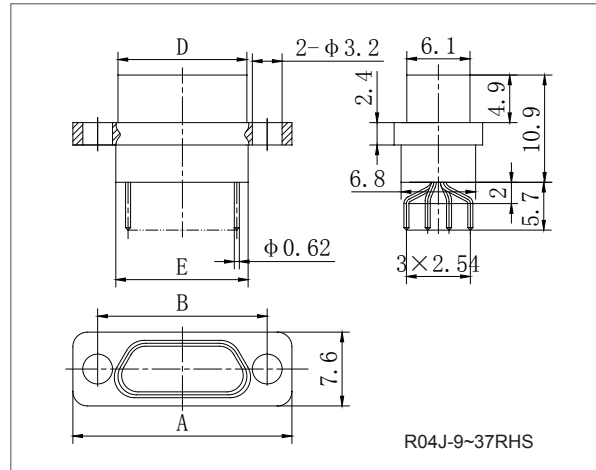
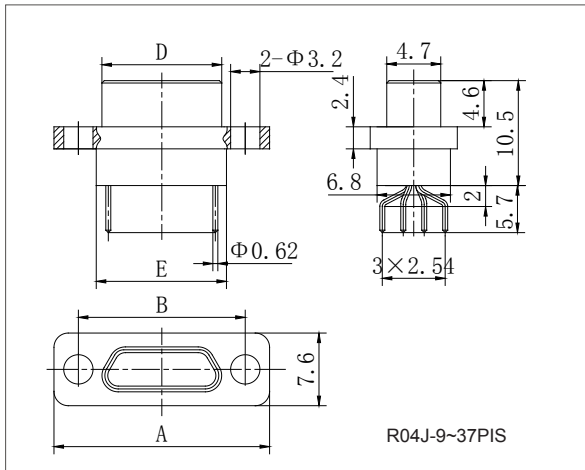
■ **Shell Plating Finish:** Nickel or Cadmium

■ **The PCB Layout:** 2.54*2.54mm

■ **Contacts:**

R04J- 9, 15, 21, 25, 31, 37, 51, 66, PI S/RHS

Outline Dimension

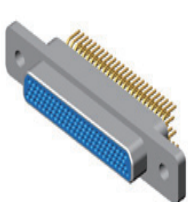


Part Number	A	B	D		E
			PIS	RHS	
R04J-9PIS/RHS	19.6	14.3	8.3	9.8	9.9
R04J-15PIS/RHS	23.5	18.2	12.3	13.7	13.8
RD4J-21PIS/RHS	27.4	22	16	17.4	17.6
R04J-25PIS/RHS	29.8	24.5	18.6	20	20.2
RD4J-31PIS/RHS	33.6	28.3	22.4	23.8	24
RD4J-37PIS/RHS	37.4	32.2	26.3	27.7	27.8
RD4J-51PIS/RHS	36.4	30.86	25	26.5	26.6
RQ4J-66PIS/RHS	42.9	37.3	31.4	32.9	33

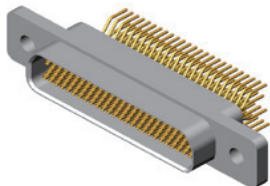
Remark: All dimensions are in mm



straight to PCB S-J type



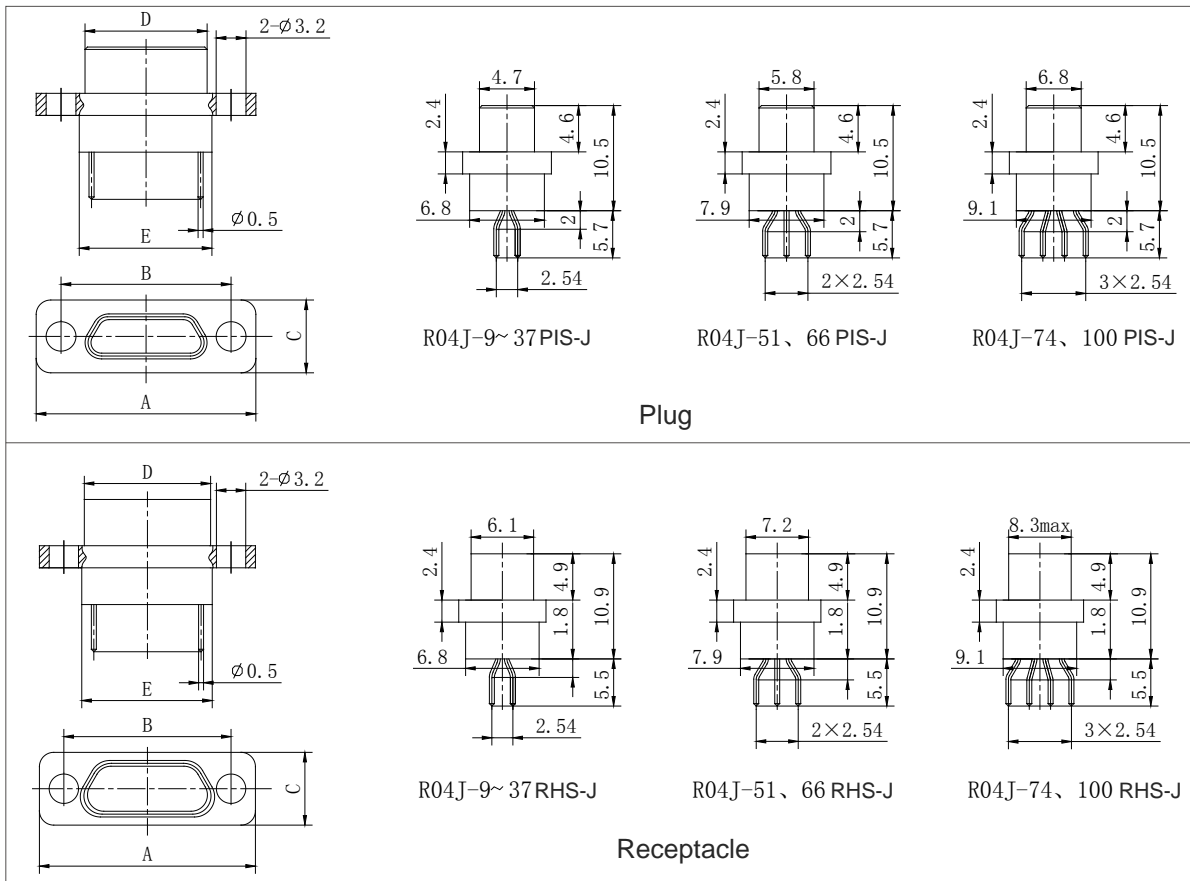
Plug:PIS-J



Receptacle:RHS-J

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

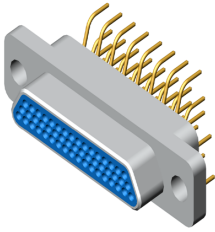
Outline Dimension



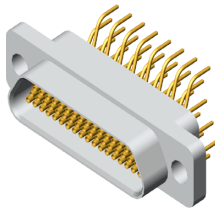
Part number	A	B	C	D		E
				PIS-J	RHS-J	
R04J-9PIS-J/RHS-J	19.6	14.3	7.6	8.3	9.8	9.9
R04J-15PIS-J/RHS-J	23.5	18.2	7.6	12.3	13.7	13.8
R04J-21PIS-J/RHS-J	27.4	22	7.6	16	17.4	17.6
R04J-25PIS-J/RHS-J	29.8	24.5	7.6	18.6	20	20.2
R04J-31PIS-J/RHS-J	33.6	28.3	7.6	22.4	23.8	24
R04J-37PIS-J/RHS-J	37.4	32.2	7.6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

Remark: All dimensions are in mm

straight to PCB - PC tail lengthened



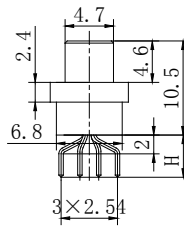
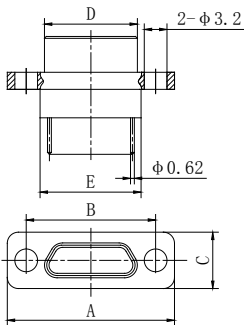
Plug



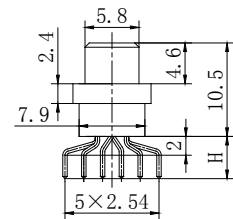
Receptacle

- **Shell Plating Finish:** Nickel or Cadmium
- **The PCB Layout:** 2.54*2.54mm
- **Contacts:** R04J- 9, 15, 21, 25, 31, 37, 51
- **PC tail length:** 6.7mm , 7.2mm or 8mm

Outline Dimension

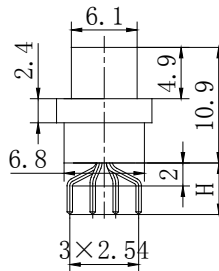
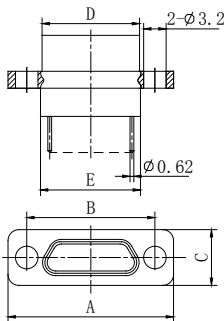


9~37Pins

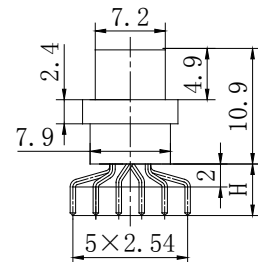


51Pins

R04J-9~51PIS4 / R04J-9~37PIS8



9~37 Sockets



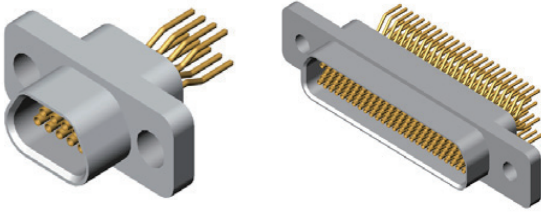
51Sockets

R04J-9~51RHS3 / R04J-9~51RHS4

Contacts	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

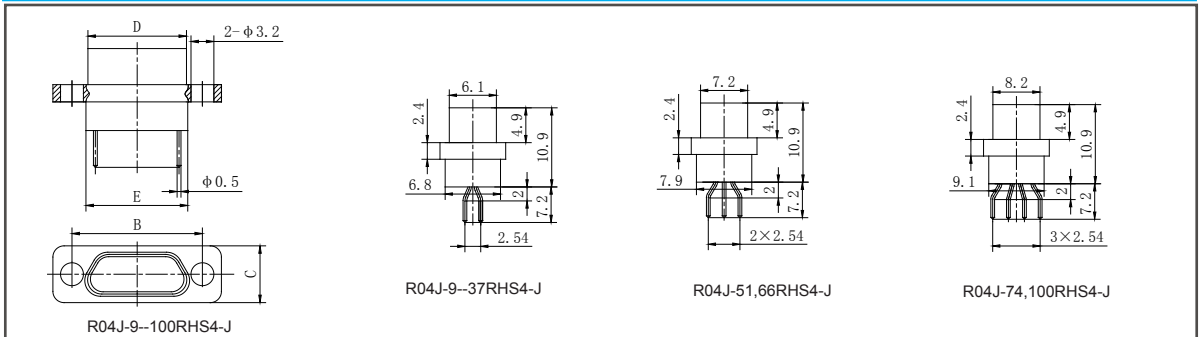
Remark: All dimensions are in mm

straight to PCB - PC tail lengthened -J type



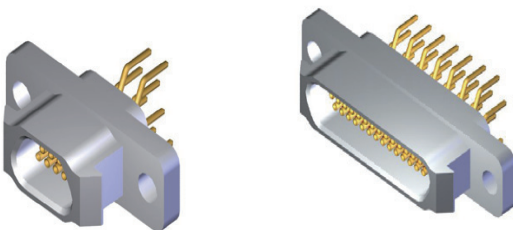
- **Shell Plating Finish:** Nickel or Cadmium
- **The PCB Layout:** 1.27*2.54mm
- **PC tail length:** 7.2mm
- **Receptacle**
- **Contacts:** R04J- 9, 15, 21, 25, 31, 37, 51
66, 74, 100RHS4-J

Outline Dimension



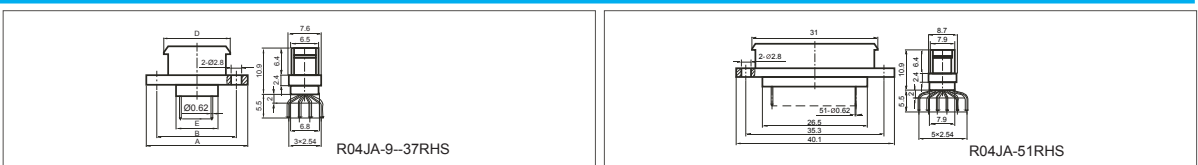
Part number	A	B	C	D	E
R04J-9RHS4-J	19.6	14.3	7.6	9.8	9.9
R04J-15RHS4-J	23.5	18.2	7.6	13.7	13.8
R04J-21RHS4-J	27.4	22	7.6	17.4	17.6
R04J-25RHS4-J	29.8	24.5	7.6	20	20.2
R04J-31RHS4-J	33.6	28.3	7.6	23.8	24
R04J-37RHS4-J	37.4	32.2	7.6	27.7	27.8
R04J-51RHS4-J	36.4	30.86	8.7	26.5	26.6
R04J-66RHS4-J	42.9	37.3	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

straight to PCB - fast lock type(R04JA)



- **Shell Plating Finish:** Nickel or Cadmium
- **The PCB Layout** 2.54*2.54mm
- **With fast locking function**
- **Receptacle**
- **Contacts:** R04JA- 9, 15, 21, 25, 31, 37, 51RHS

Outline Dimension



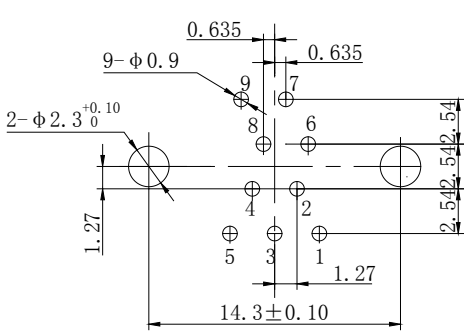
Part number	A	B	D	E
R04JA-9RHS	23.4	18.6	14.8	9.8
R04JA-15RHS	27.4	22.6	18.3	13.8
RD4JA-21RHS	31.1	26.3	22	17.5
RD4JA-25RHS	33.7	28.9	24.6	20.1
R04JA-31RHS	37.5	32.7	28.4	24.1
R04JA-37RHS	41.4	36.6	32.3	27.8

Remark: All dimensions are in mm

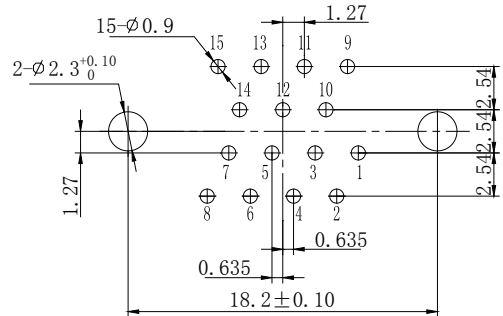


PCB Layout - PI Connector

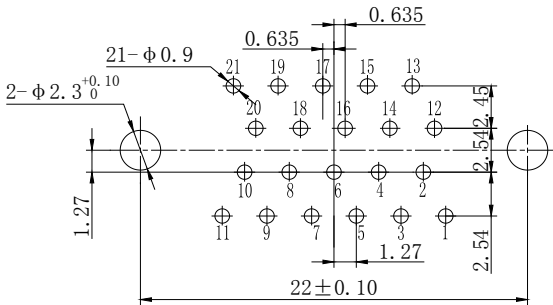
- Patterns shown are for connector mounting side of PC board
- R04J Straight to PCB- S, S4, S8 Type PI Connector



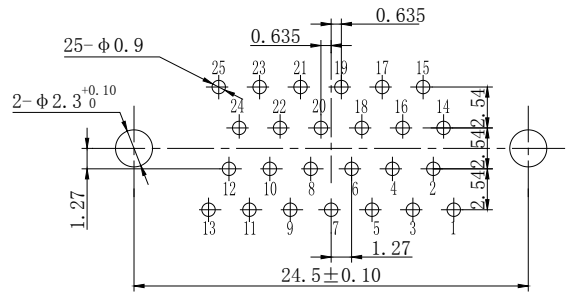
R04J-9PIS, PIS4, PIS8



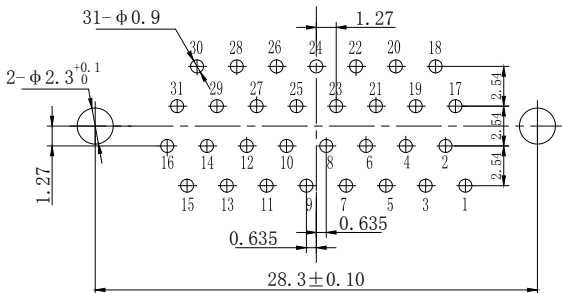
R04J-15PIS, PIS4, PIS8



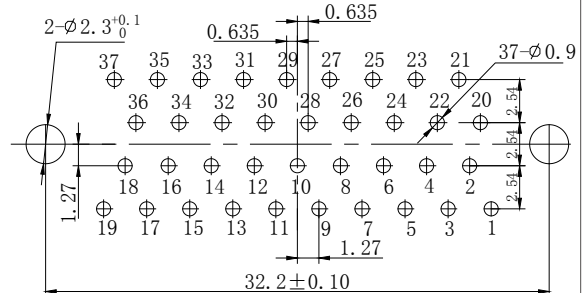
R04J-21PIS, PIS4, PIS8



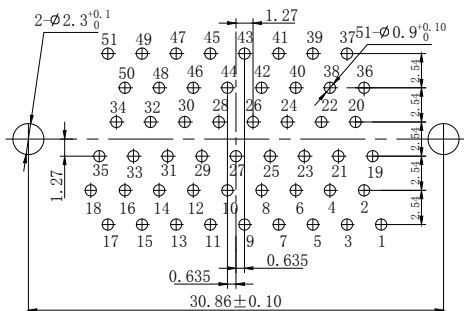
R04J-25PIS, PIS4, PIS8



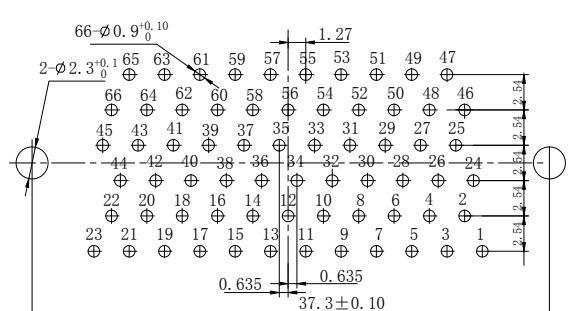
R04J-31PIS, PIS4, PIS8



R04J-37PIS, PIS4, PIS8



R04J-51PIS, PIS4, PIS8



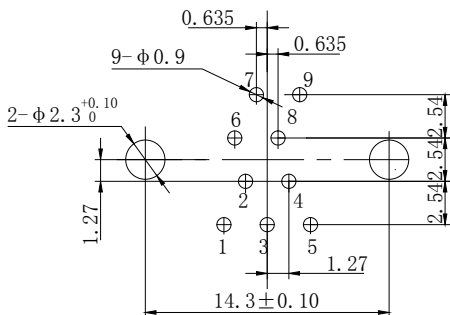
R04J-66PIS, PIS4, PIS8

Remark: All dimensions are in mm

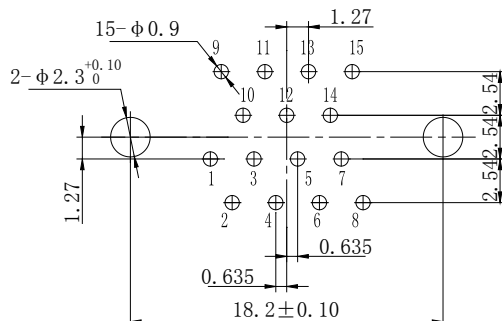


PCB Layout - RH Connector

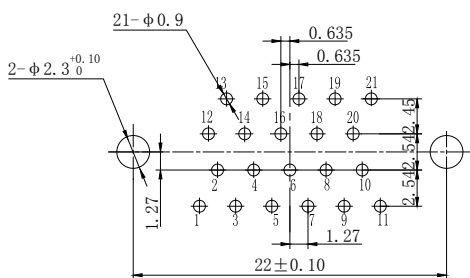
- Patterns shown are for connector mounting side of PC board.
- R04J Straight to PCB- S, S3, S4 Type RH Connector



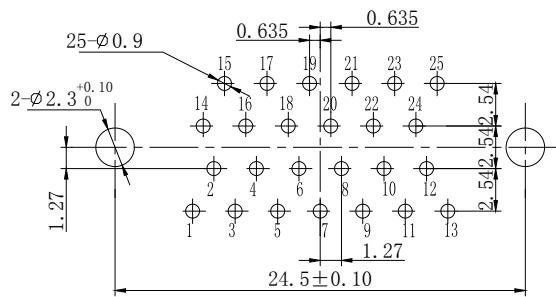
R04J-9RHS, RHS3, RHS4



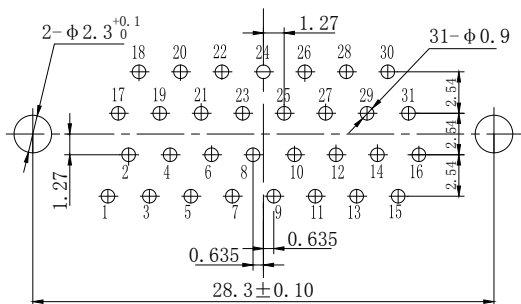
R04J-15RHS, RHS3, RHS4



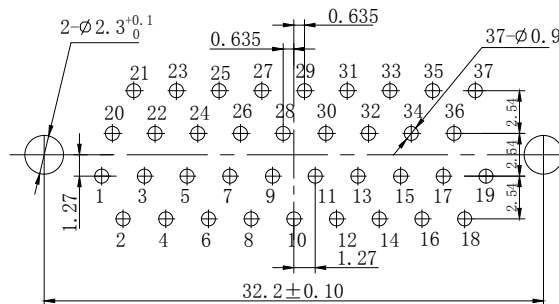
R04J-21RHS, RHS3, RHS4



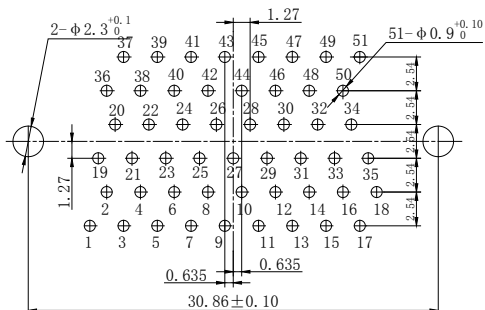
R04J-25RHS, RHS3, RHS4



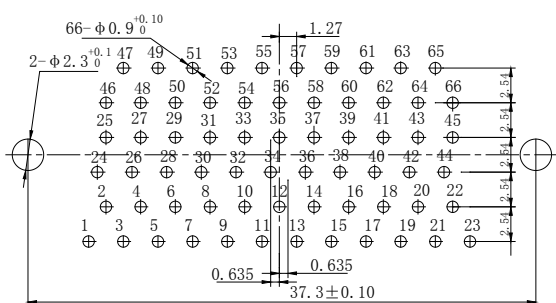
R04J-31RHS, RHS3, RHS4



R04J-37RHS, RHS3, RHS4



R04J-51RHS, RHS3, RHS4



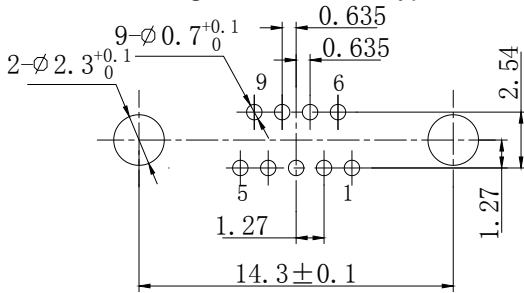
R04J-66RHS, RHS3, RHS4

Remark: All dimensions are in mm

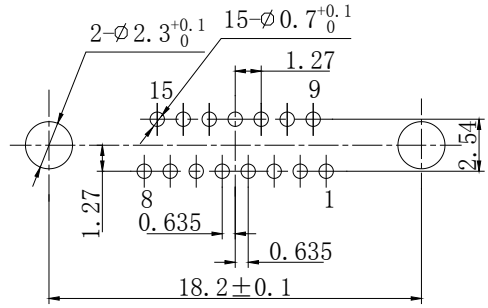


PCB Layout - PI Connector

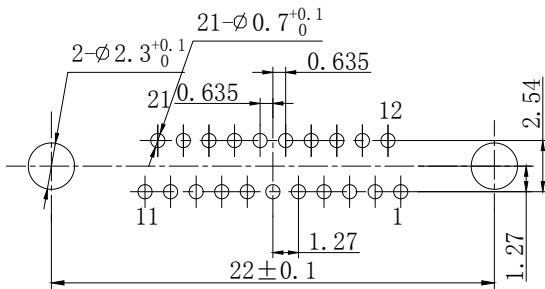
- Patterns shown are for connector mounting side of PC board.
- R04J Straight to PCB- S-J Type PI Connector



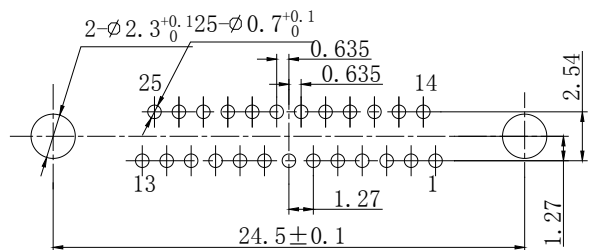
R04J-9PIS-J



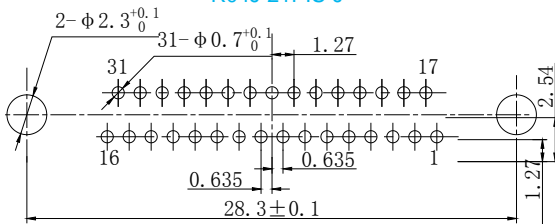
R04J-15PIS-J



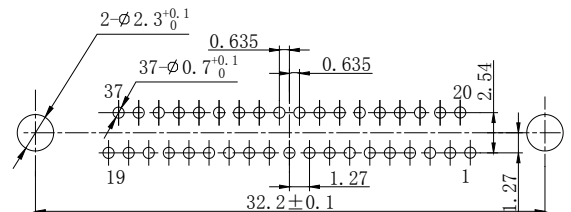
R04J-21PIS-J



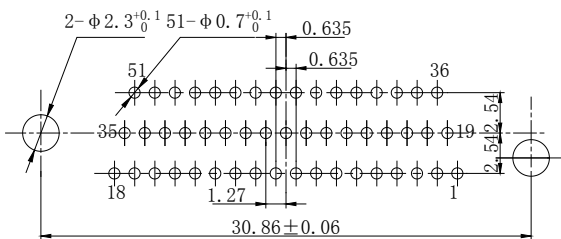
R04J-25PIS-J



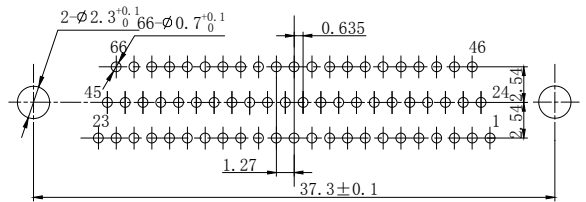
R04J-31PIS-J



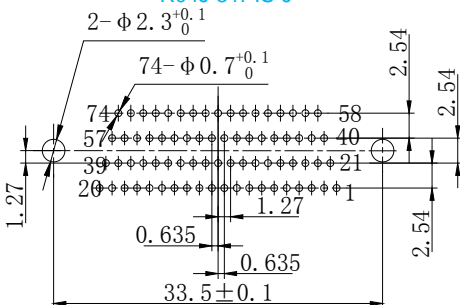
R04J-37PIS-J



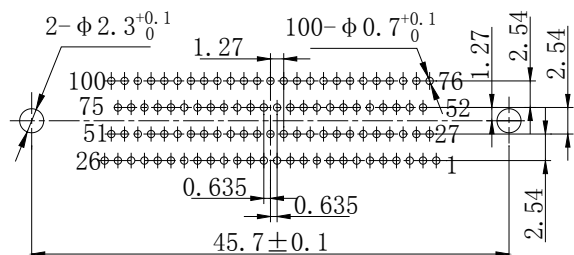
R04J-51PIS-J



R04J-66PIS-J



R04J-74PIS-J



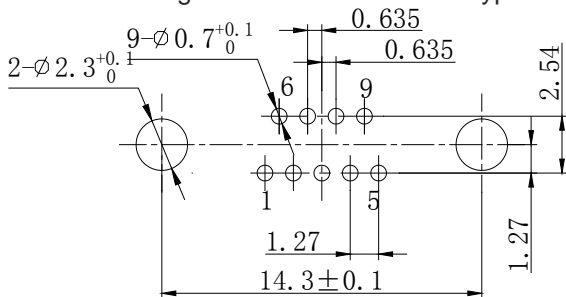
R04J-100PIS-J

Remark: All dimensions are in mm

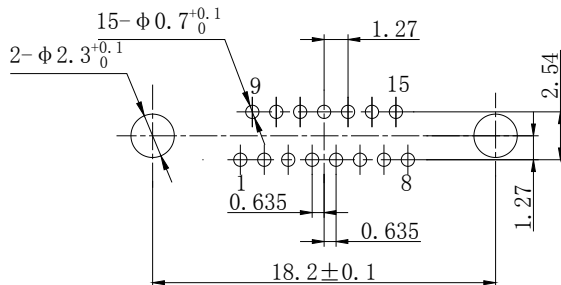


PCB Layout - RH Connector

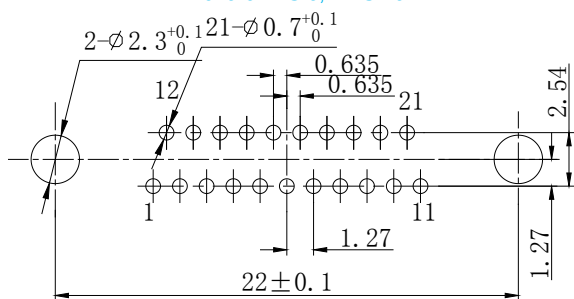
- Patterns shown are for connector mounting side of PC board.
- R04J Straight to PCB- S-J & S4 -J Type RH Connector



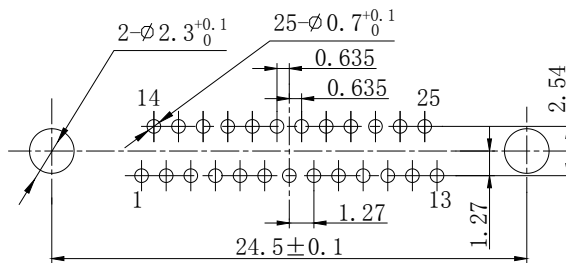
R04J-9RHS-J, RHS4-J



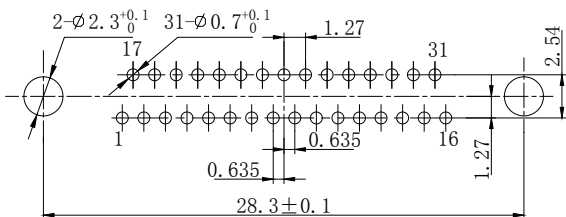
R04J-15RHS-J, RHS4-J



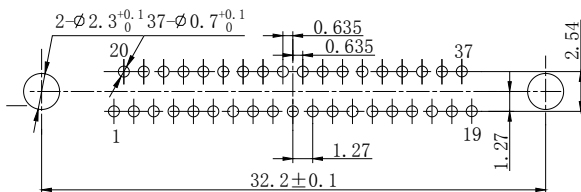
R04J-21RHS-J, RHS4-J



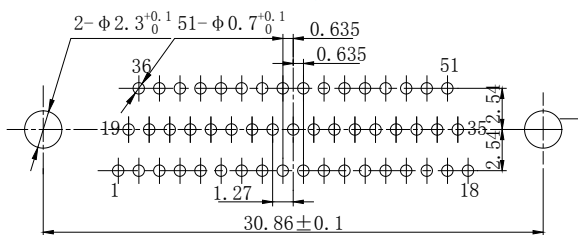
R04J-25RHS-J, RHS4-J



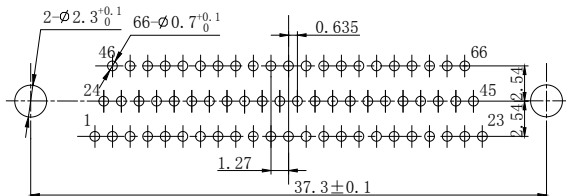
R04J-31RHS-J, RHS4-J



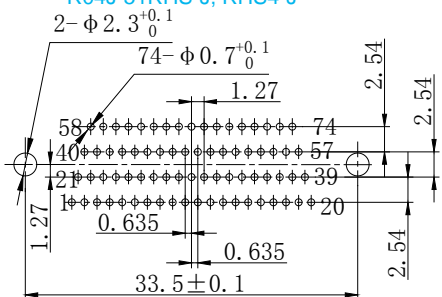
R04J-37RHS-J, RHS4-J



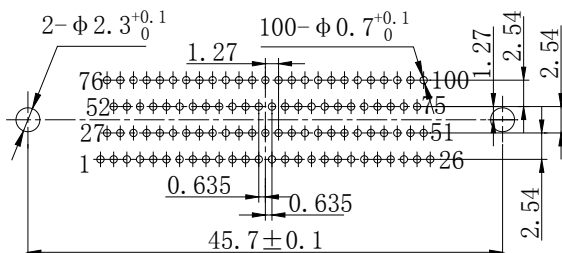
R04J-51RHS-J, RHS4-J



R04J-66RHS-J, RHS4-J



R04J-74RHS-J, RHS4-J



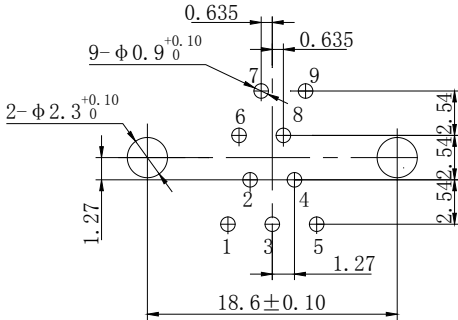
R04J-100RHS-J, RHS4-J

Remark: All dimensions are in mm

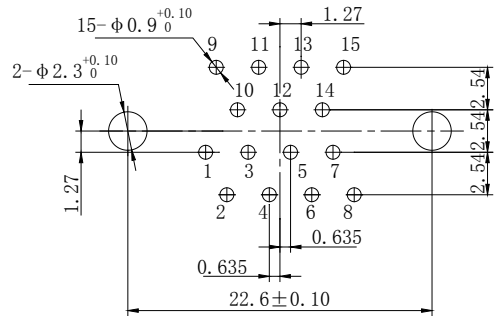


PCB Layout - fast lock RH Connector

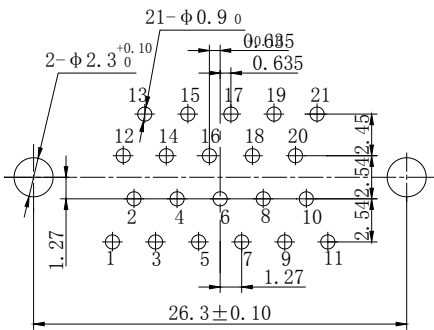
- Patterns shown are for connector mounting side of PC board.
- R04JA Straight to PCB- S Type RH Connector



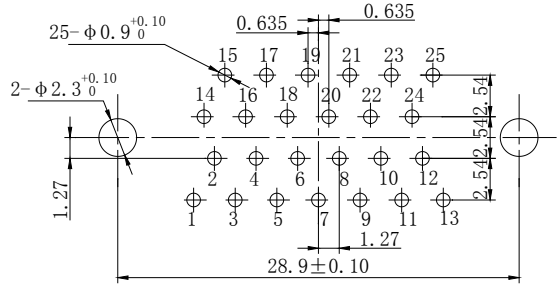
R04JA-9RHS



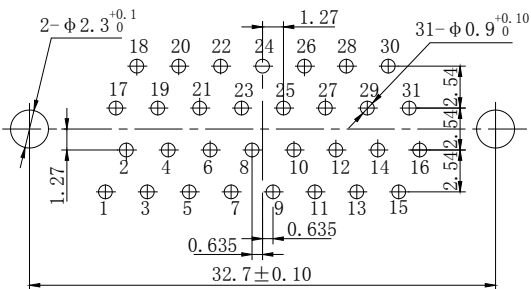
R04JA-15RHS



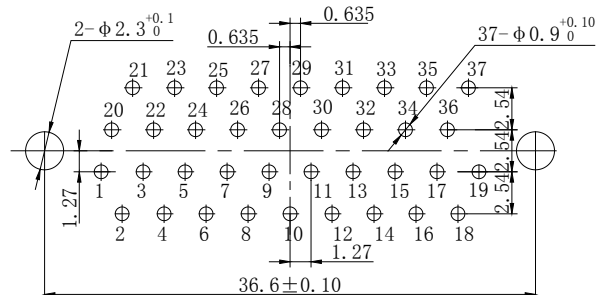
R04JA-21RHS



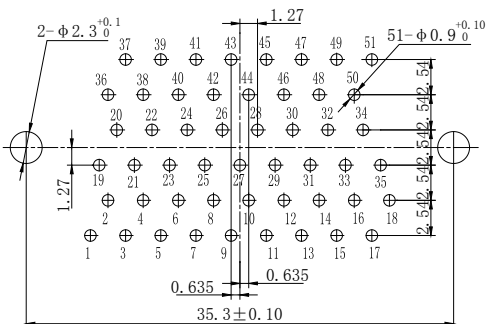
R04JA-25RHS



R04JA-31RHS



R04JA-37RHS



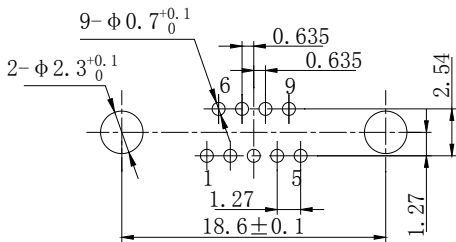
R04JA-51RHS

Remark: All dimensions are in mm

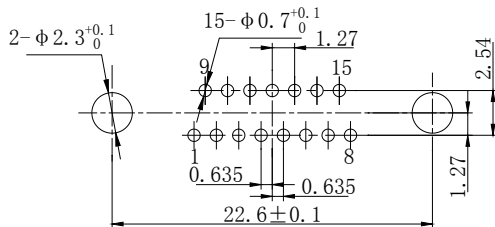


PCB Layout - fast lock RH Connector

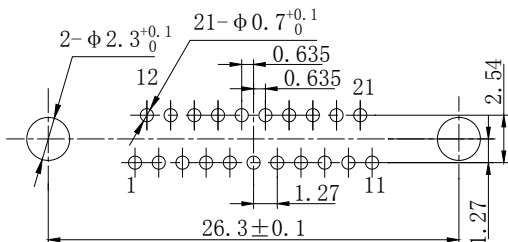
- Patterns shown are for connector mounting side of PC board.
- R04JA Straight to PCB- S-J Type RH Connector



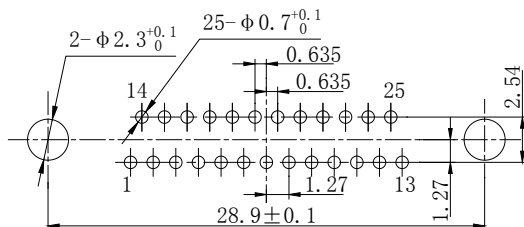
R04JA-9RHS-J



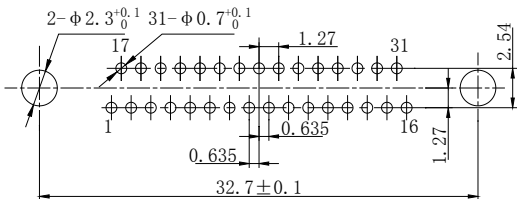
R04JA-15RHS-J



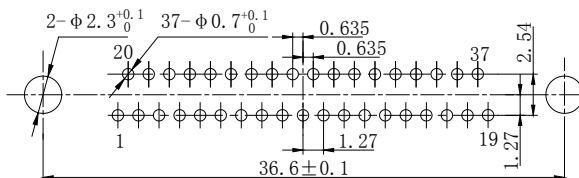
R04JA-21RHS-J



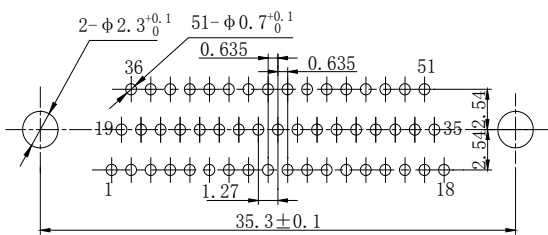
R04JA-25RHS-J



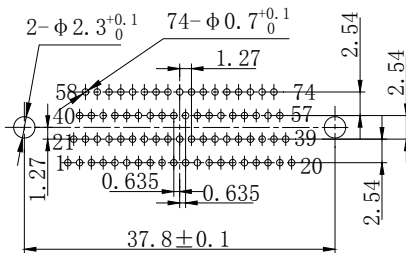
R04JA-31RHS-J



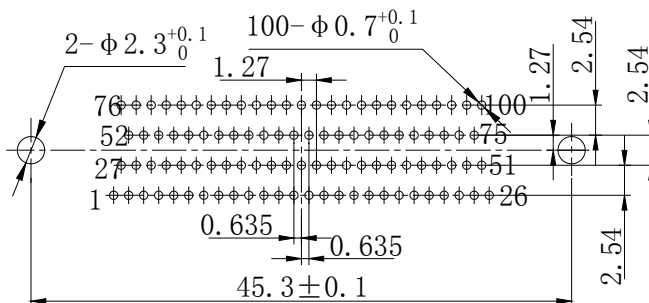
R04JA-37RHS-J



R04JA-51RHS-J



R04JA-74RHS-J



R04JA-100RHS-J

Remark: All dimensions are in mm