

MIL-DTL-83513 Micro D-Sub Connectors

R04A Series Straight to PCB Type



Brief 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

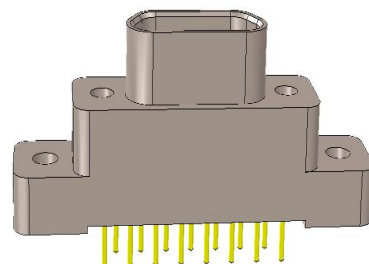
Specification

- Environment temperature: $-55\text{ }^{\circ}\text{C} \sim 125\text{ }^{\circ}\text{C}$
- 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

Product stereogram

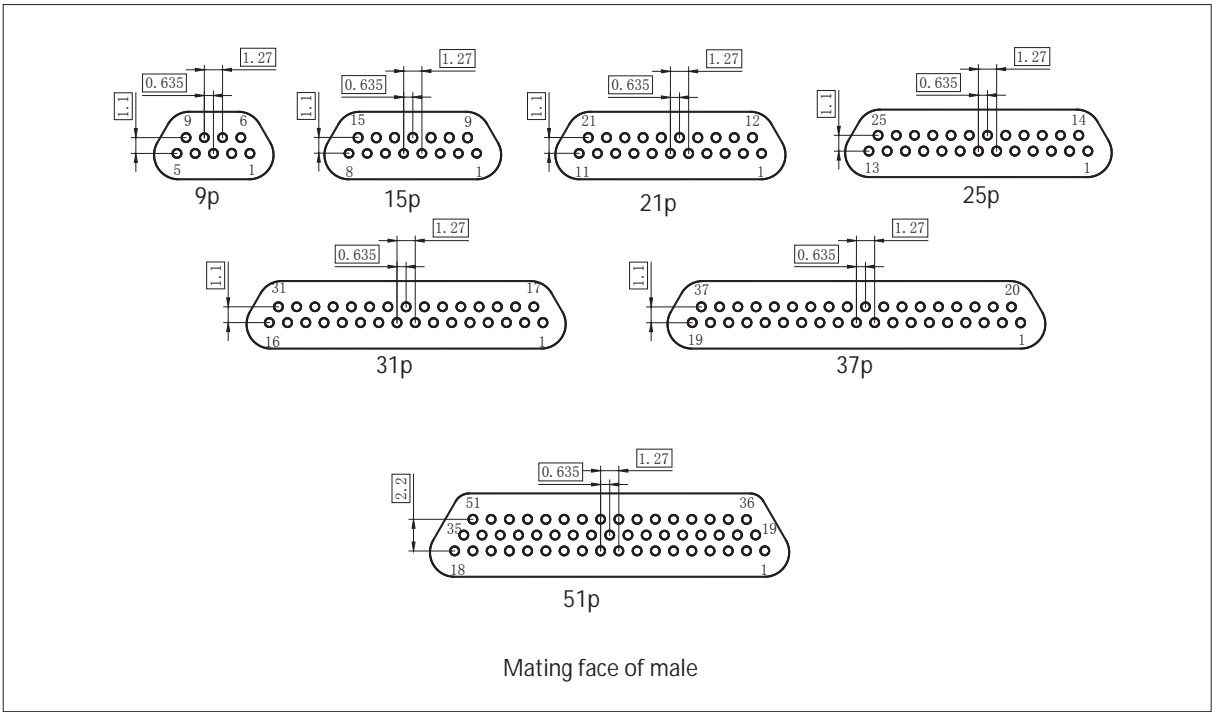


SA style



SB style

Contact arrangements



How to order

Sample part number:	R04A	-31	PI	SA	3	N04
Series:	R04A-Micro D connectors for MIL-DTL-83513					
Contact number:	9,15,21,25,31,37,51 pins					
Contact type:	PI-pin in plug RH-socket in receptacle					
Termination type:	SA style and the PCB layout is 2.54*1.91mm SB style and the PCB layout is 2.54*2.54mm					
Tail length:	1-2.77mm		2-3.56mm		3-4.37mm	
Locking hardware:	blank-without N04-locking hardware, please see page3					

The mating locking hardware

Code	Feature	Stereogram	Outline dimension
N04	1. Jackpost with hex head. 2. Fitted to vertical mounting with pcb.		

Note: all dimensions are in mm.

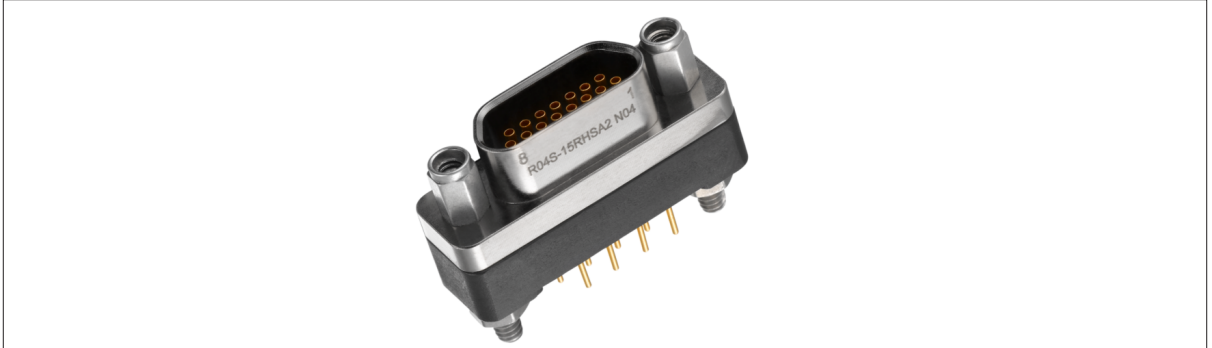
Tail length

tail code	tail length	Recommend the thickness of PCB(in mm)
1	2.77	1.2~2.2
2	3.56	2.0~3.0
3	4.37	2.8~3.8

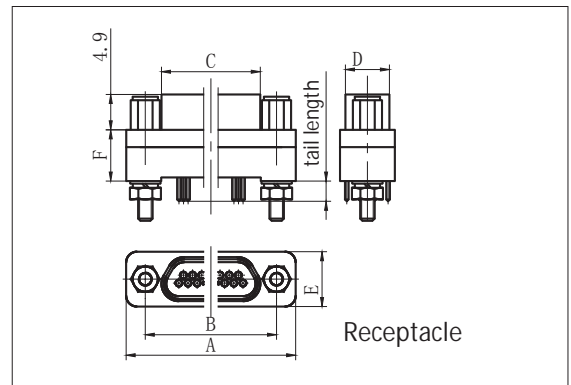
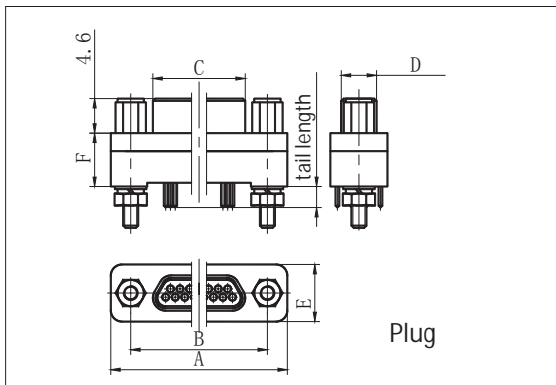
Notes: all dimensions are in mm.

R04A series straight to PCB connectors for SA style

Product stereogram



Outline Dimension



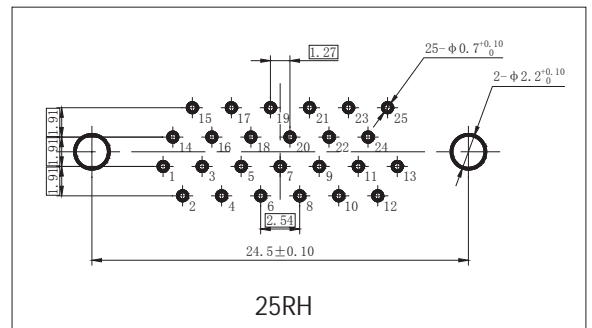
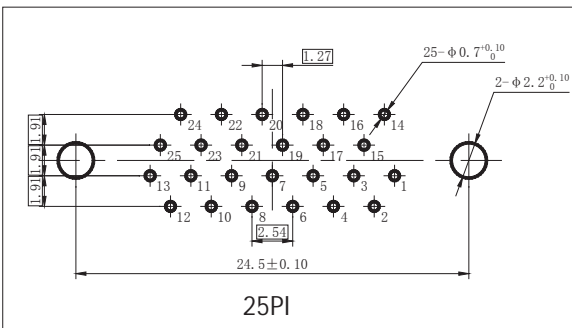
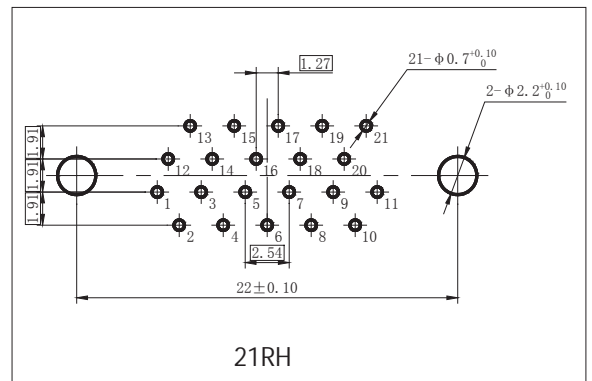
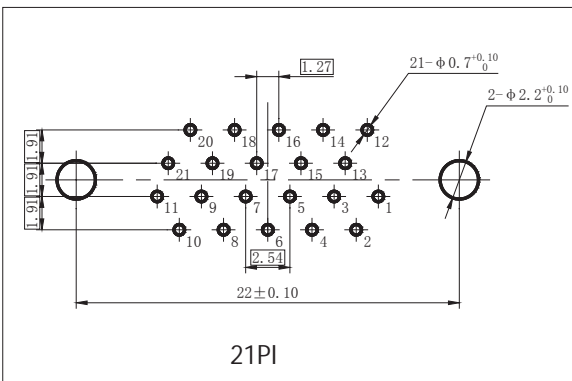
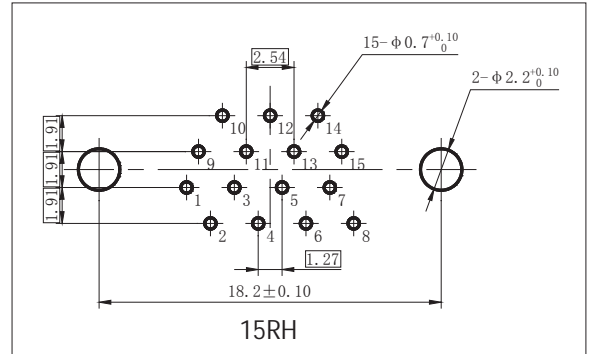
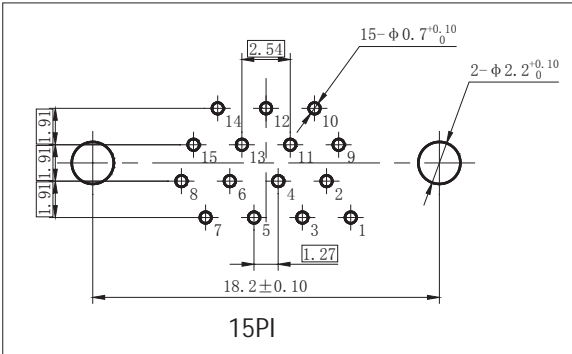
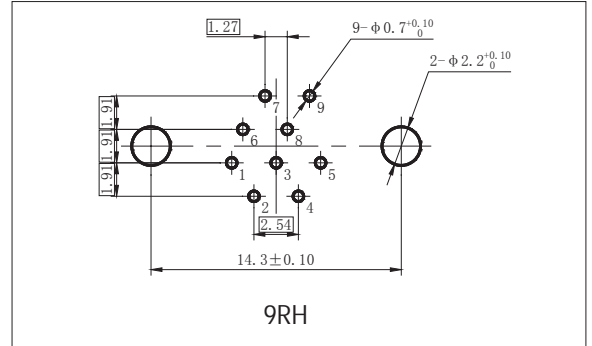
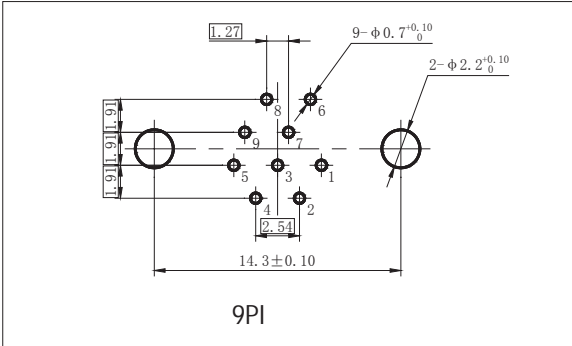
Contacts Nos	Outline dimension(in mm)					
	A	B	C	D	E	F
9PI	19.6	14.3	8.4	4.7	7.6	7.1
15PI	23.8	18.2	12.3	4.7	7.6	7.1
21PI	27.3	22	16.1	4.7	7.6	7.1
25PI	29.8	24.5	18.6	4.7	7.6	7.1
31PI	33.6	28.3	22.4	4.7	7.6	7.1
37PI	37.4	32.1	26.2	4.7	7.6	7.1
51PI	36.5	30.9	25	5.8	8.7	8.2
9RH	19.6	14.3	9.9	6.1	7.6	7.1
15RH	23.5	18.2	13.7	6.1	7.6	7.1
21RH	27.3	22	17.5	6.1	7.6	7.1
25RH	29.8	24.5	20.1	6.1	7.6	7.1
31RH	33.6	28.3	23.9	6.1	7.6	7.1
37RH	37.4	32.1	27.7	6.1	7.6	7.1
51RH	36.5	30.9	26.7	7.2	8.7	8.2

Notes: all dimensions are in mm.

Recommend the PCB layout

PCB layout for plug

PCB layout for receptacle

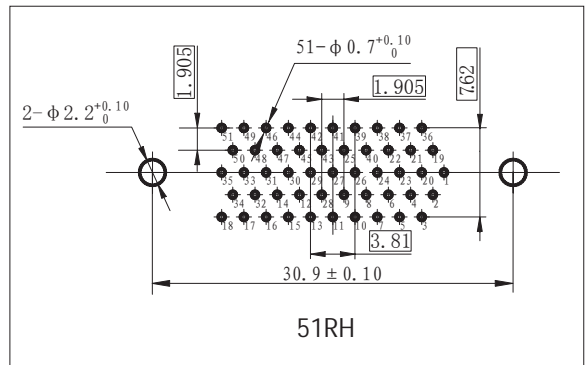
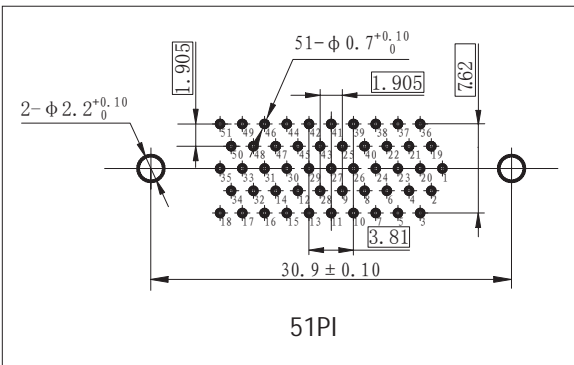
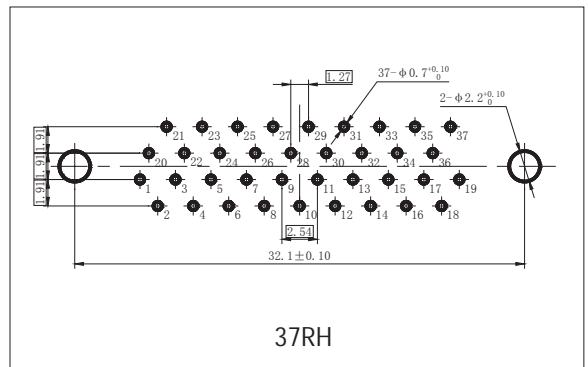
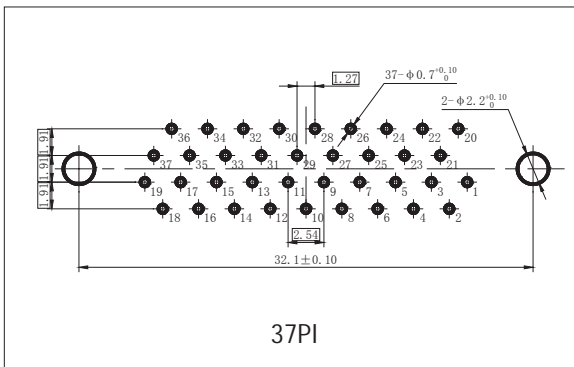
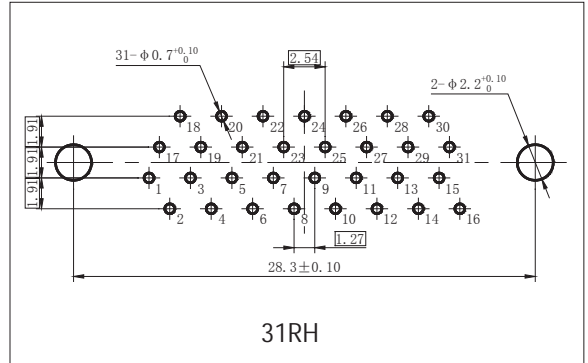
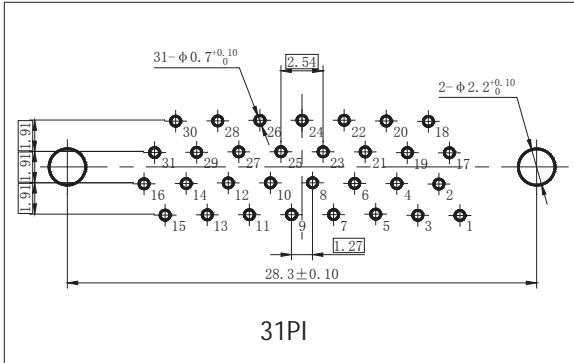


Notes: 1. all dimensions are in mm. 2. View top side of PCB board.

Recommend the PCB layout

■ PCB layout for plug

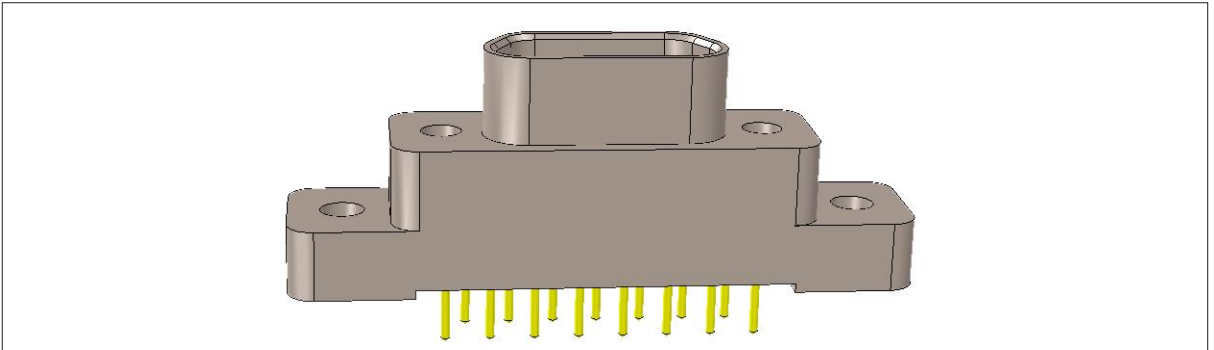
■ PCB layout for receptacle



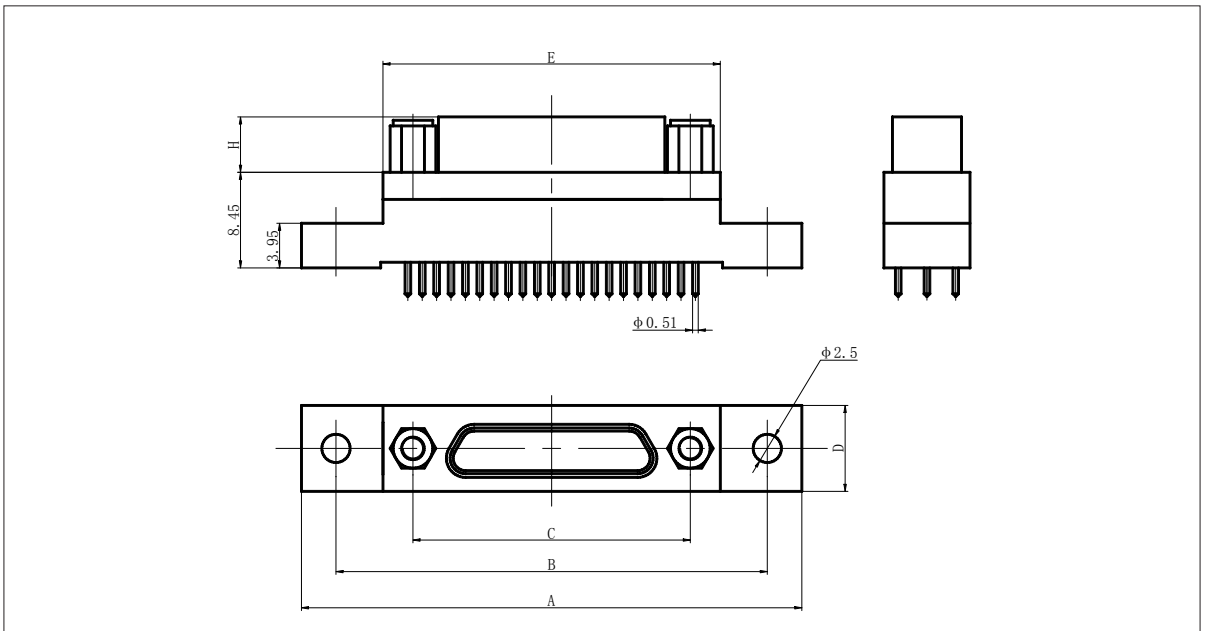
Notes: 1. all dimensions are in mm. 2. View top side of PCB board.

R04A series straight to PCB connectors for SB style

Product stereogram



Outline Dimension

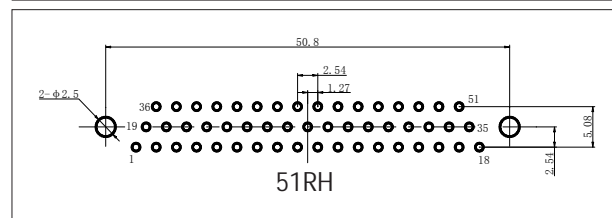
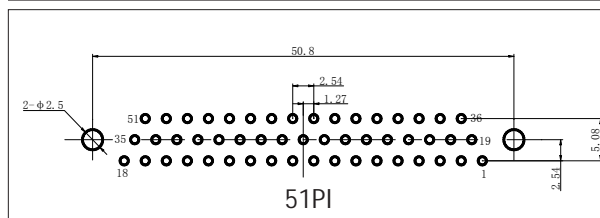
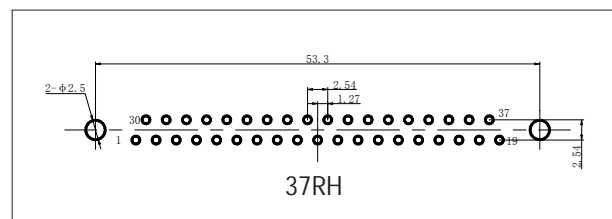
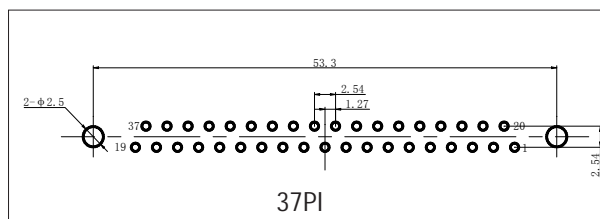
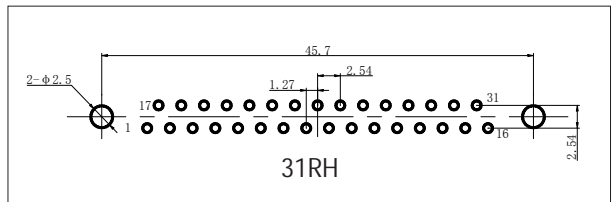
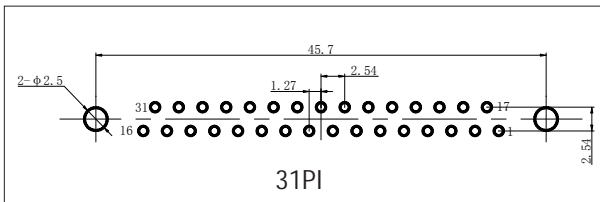
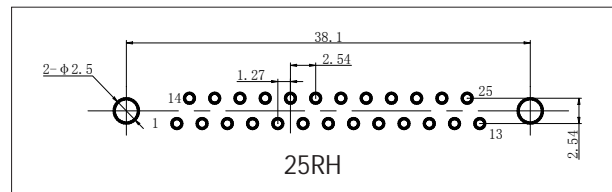
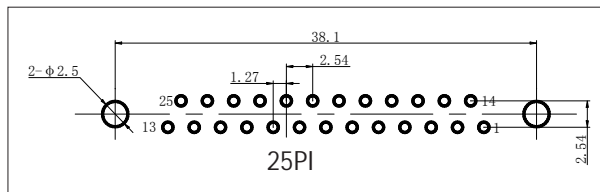
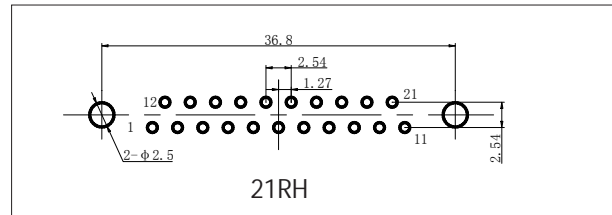
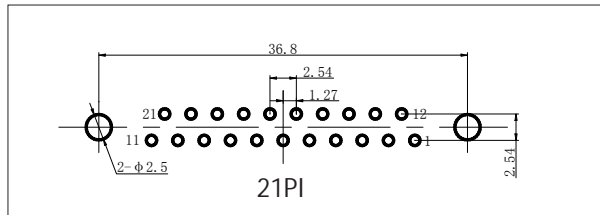
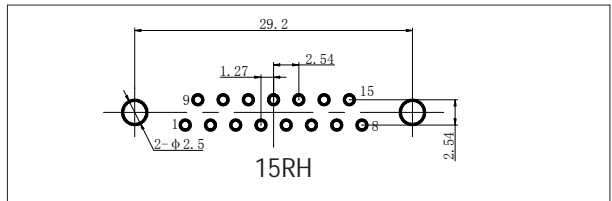
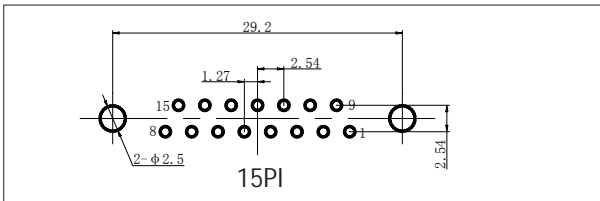
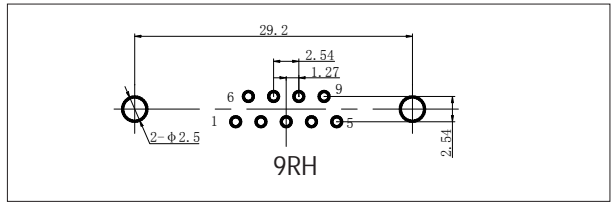
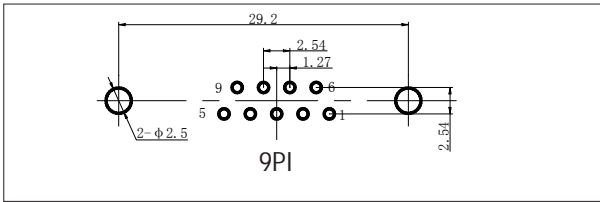


Contacts Nos	Outline dimension(in mm)						
	A	B	C	D	E	H	
						PI	RH
9	35.31	29.21	14.35	7.9	20.1	4.6	4.9
15	35.31	29.21	18.16	7.9	23.9	4.6	4.9
21	42.93	36.83	21.97	7.9	30.0	4.6	4.9
25	44.2	38.1	24.51	7.9	32.4	4.6	4.9
31	51.82	45.72	28.32	7.9	40.0	4.6	4.9
37	59.44	53.34	32.13	7.9	47.6	4.6	4.9
51	57.64	50.8	30.86	8.9	45.1	4.6	4.9

Recommend the PCB layout

PCB layout for plug

PCB layout for receptacle



Notes: 1. all dimensions are in mm. 2. View top side of PCB board.