



MIL-DTL-32139 Nano D-sub Connectors

R06 SMT Series

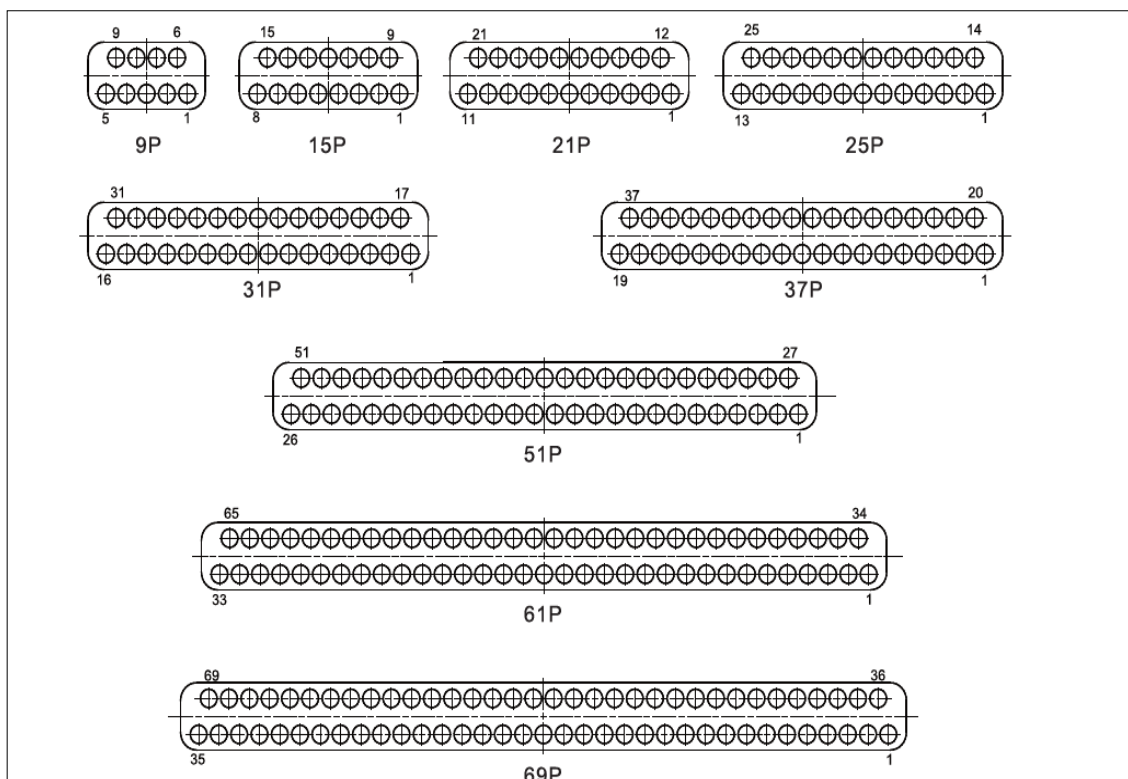
Brief introduction

- Contacts: 9, 15, 21, 25, 31, 37, 51, 65, 69
- Twist flexible micro pin (twist pin), 0.635mm pitch, micro miniature outline dimension
- Screw nut locking, it is gently when insert and extract, stably locked
- It is used for all kinds for electric circuit system interconnection which have high density, micro, light, highly reliable requirement, it can meet light and miniaturize demand
- Plug with twist pin, receptacle with socket, free terminal with locking screw, fixed terminal with nut, standard mated connector locked by screw and nut
- Standard: MIL-DTL-32139
- Undefined tolerance is ± 0.13

Specification

- | | | | |
|---|---------------------------------|--------------------------|----------------------------------|
| ■ Environment: | -55°C ~ +125°C | ■ Contact resistance: | $\leq 21\text{m}\Omega$ |
| ■ Vibration: | 10Hz~2000Hz 196m/s ² | ■ Insulation resistance: | $\geq 5000\text{M}\Omega$ 100VDC |
| ■ Shock: | 980m/s ² 6ms | ■ Dielectric strength: | 250V |
| ■ Rated current: | 1A | ■ Machine life: | 200 times |
| ■ Random vibration: power spectrum density 0.4G ² /Hz, r.m.s value of total acceleration 23.1G | | | |

Contact layout



Remarked: The above layout is view from plug mate side end face

How to order

Series	R06	-2	2	1	-M	2	-9	PI	-TH
Contact row: 2 — tow rows									
Shell plating: 2 — nickel plating									
Contact plating: 1 — gold plating									
Tail termination type : M— SMT									
Mounting style: 2— vertical SMT 3 — horizontal SMT 8 — straddle flexible SMT									
Contact number: 9、15、21、25、31、37、51、65、69									
Contact type PI — pin in plug RH— socket in receptacle									
Locking component type: JC— locking screw(straight slot) JC1— locking screw(hex, not recommend) TH— connect nut NH— guide hole with nut mounted DZ— guide pin TH1— solder nut SH— solder guide hole									

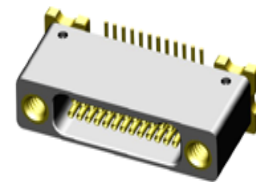
Choose mating connector

- When choosing mating connector with locking accessories usually choose the locking component which one side with connect nut(TH), the other side with locking screw(JC).
- When choosing product with guide accessories,connector without locked component but only with guide component,it need fix on mounting panel after mated,for avoiding connector take off. When choosing mating connector with guide components usually choose the guide component which one side with guide pin, the other side with guide hole

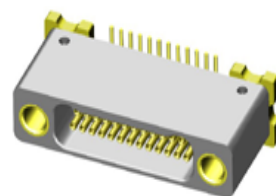
R06 Vertical SMT Receptacle with Solder Locking Component Series

Order marks

Series	R06	-2	2	1	-M	2	-25	RH	-TH1
Contact row:									
2 — tow rows									
Shell plating:									
2 — nickel plating									
Contact plating:									
1 — gold plating									
Tail termination type :									
M— SMT									
Mounting style:									
2— vertical SMT									
Contact number:									
9、15、21、25、31、37、51、65、69									
Contact type:									
RH— socket in receptacle									
Locking component type:									
TH1— solder nut									
SH— solder guide hole									



R06-221-M2-25RH-TH1

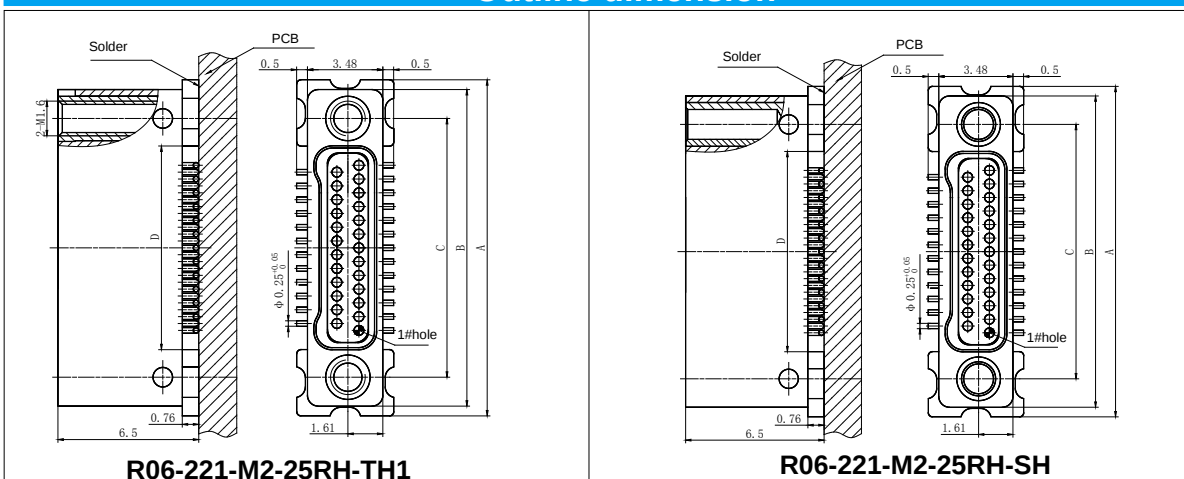


R06-221-M2-25RH-SH

Remark

- Connector of mounting hole solder by SMT, suit for PCB which can't design mounting hole
- R06-221-M2-**RH-TH1 usually mated with plug which have locking screw, R06-221-M2-**RH-SH usually mated with plug which have guide pin

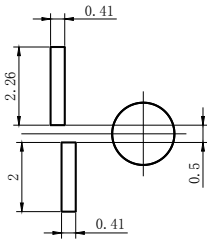
Outline dimension



Pin count	Dimension				Pin count	Dimension			
	A	B	C	D		A	B	C	D
9pins	10.43	9.63	6.86	4.31	15pins	12.33	11.53	8.76	6.22
21pins	14.24	13.44	10.67	8.13	25pins	15.51	14.71	11.94	9.4
31pins	17.41	16.61	13.84	11.30	37pins	19.32	18.52	15.75	13.21
51pins	23.76	22.96	20.19	17.65	65pins	28.21	27.41	24.64	22.10
69pins	29.48	28.68	25.91	23.37					

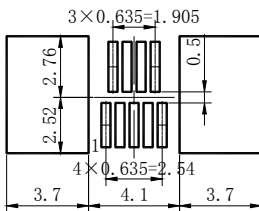
Remark: All dimensions are in mm

Suggested PCB Layout



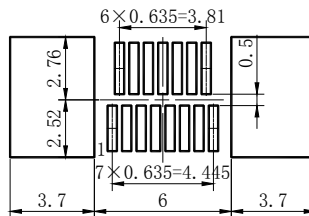
Lead footprint dimension

6 ○○○○ 9
1 ○○○○ 5

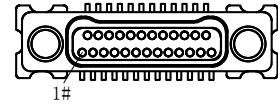


R06-221-M2-9RH-TH1

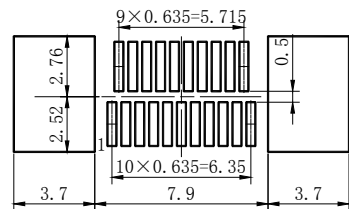
9 ○○○○○○ 15
1 ○○○○○○ 8



R06-221-M2-15RH-TH1

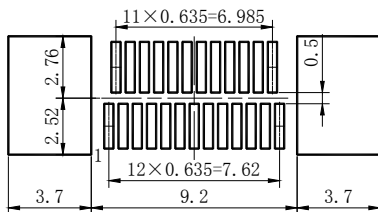


12 ○○○○○○○○○○ 21
1 ○○○○○○○○○○ 11



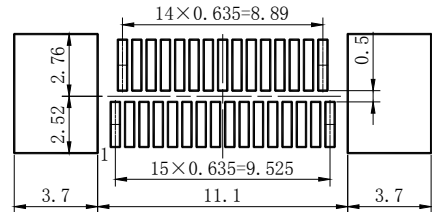
R06-221-M2-21RH-TH1

14 ○○○○○○○○○○ 25
1 ○○○○○○○○○○ 13



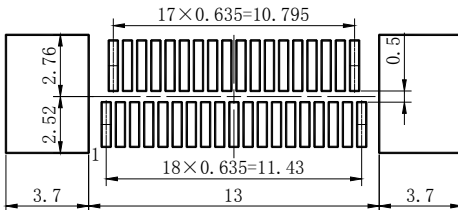
R06-221-M2-25RH-TH1

17 ○○○○○○○○○○ 31
1 ○○○○○○○○○○ 16



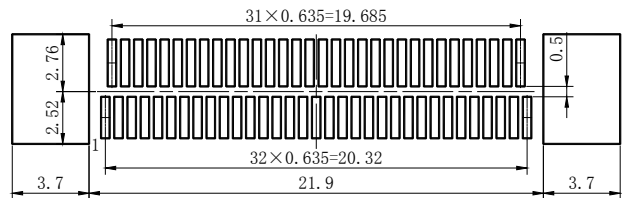
R06-221-M2-31RH-TH1

20 ○○○○○○○○○○ 37
1 ○○○○○○○○○○ 19



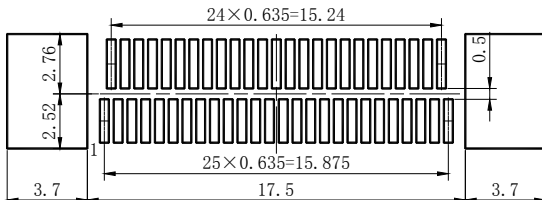
R06-221-M2-37RH-TH1

34 ○○○○○○○○○○ 65
1 ○○○○○○○○○○ 33



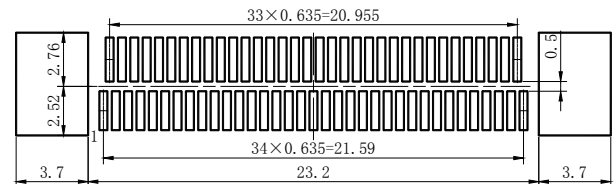
R06-221-M2-65RH-TH1

27 ○○○○○○○○○○ 51
1 ○○○○○○○○○○ 26



R06-221-M2-51RH-TH1

36 ○○○○○○○○○○ 69
1 ○○○○○○○○○○ 35



R06-221-M2-69RH-TH1

Remark: All dimensions are in mm