



MIL-DTL-32139 Nano D-sub Connectors

R06 Straight to PCB Series

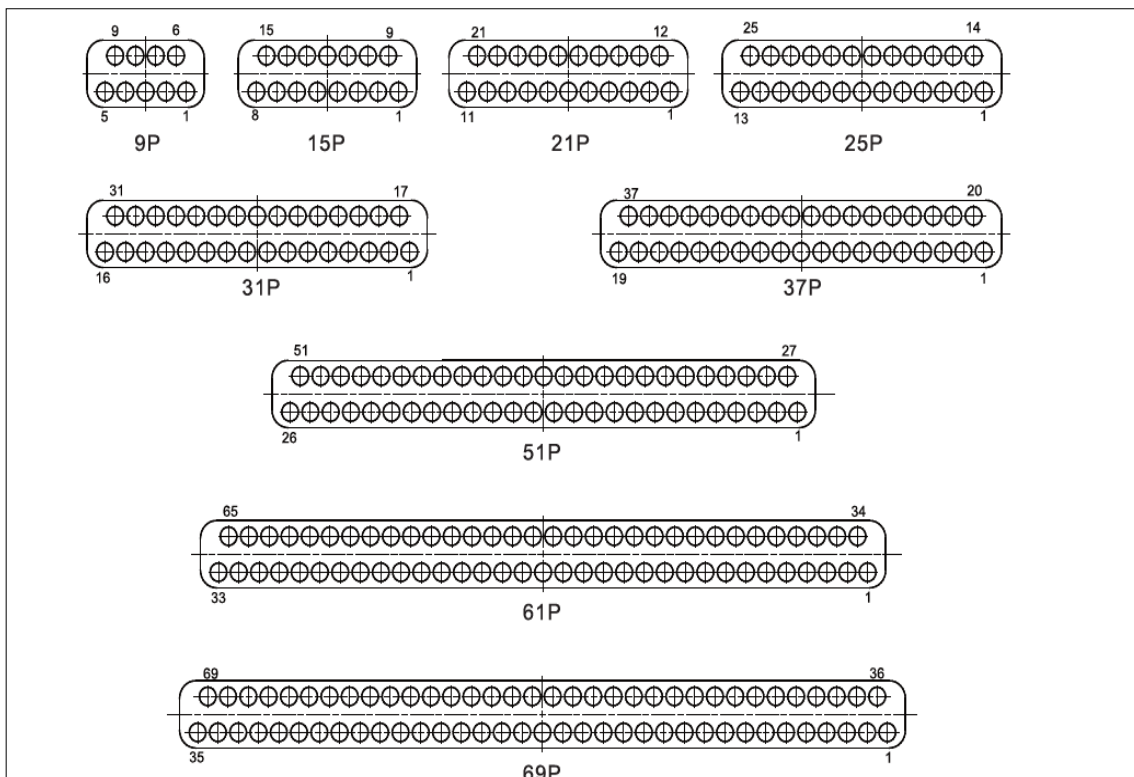
Brief introduction

- 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

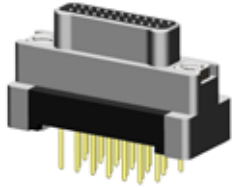
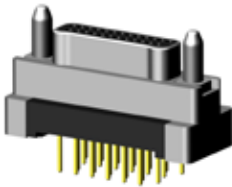


Remark: The above layout is view from plug mate side end face



R06 Straight to PCB Plug Series

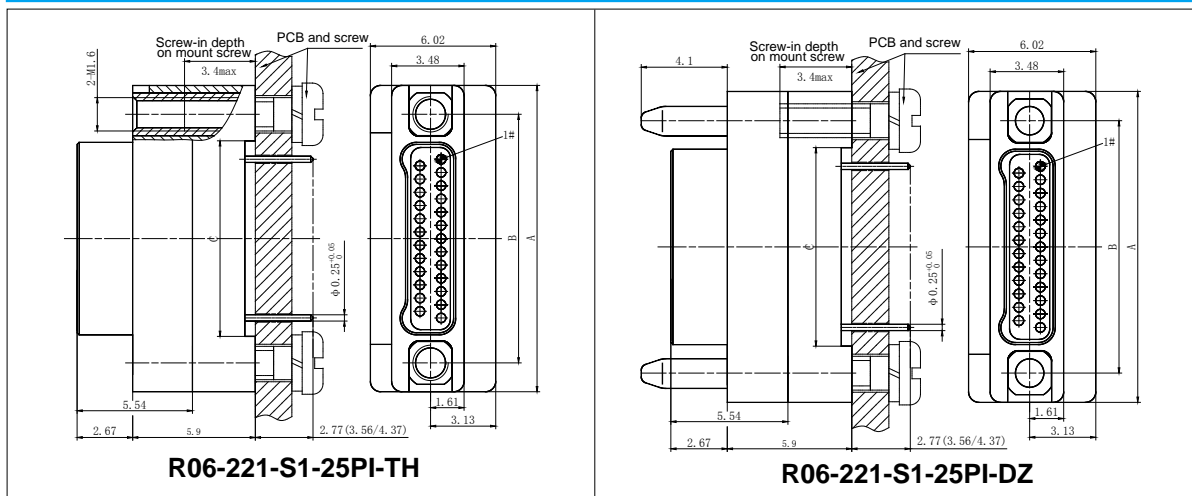
Order marks

Series	R06	-2	2	1	-S	1	-25	PI	-TH	 <p>R06-221-S1-25PI-TH</p>  <p>R06-221-S1-25PI-DZ</p>
Contact row:	2 — tow rows									
Shell plating:	2 — nickel plating									
Contact plating:	1 — gold plating									
Tail termination type :	S — straight to pcb									
Tail length:	1 — 2.77mm 2 — 3.56mm 3 — 4.37mm									
Contact number:	9、15、21、25、31、37、51、65、69									
Contact type :	PI — pin in plug									
Locking type:	DZ — guide pin TH — connect nut									

Remark

- R06-221-S*-**PI-TH usually mated with receptacle which have locking screw, R06-221-S*-**PI-DZ usually mated with receptacle which have guide hole
- 3 kinds of tail length, customized produce for other length

Outline dimension

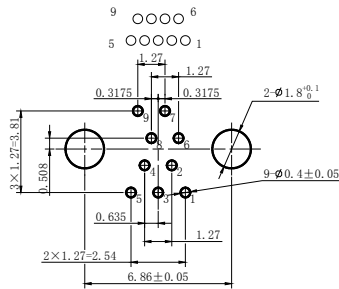
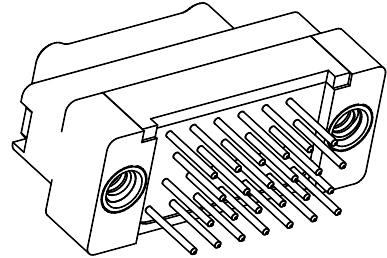
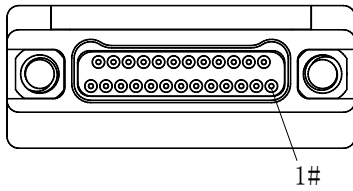


Pin count	Dimension			Pin count	Dimension			Pin count	Dimension		
	A	B	C		A	B	C		A	B	C
9pins	9.63	6.86	4.31	15pins	11.53	8.76	6.22	21pins	13.44	10.67	8.13
25pins	14.71	11.94	9.4	31pins	16.61	13.84	11.3	37pins	18.52	15.75	13.21
51pins	22.96	20.19	17.65	65pins	27.41	24.64	22.10	69pins	28.68	25.91	23.37

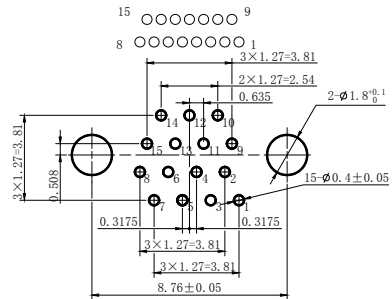
Remark: All dimensions are in mm



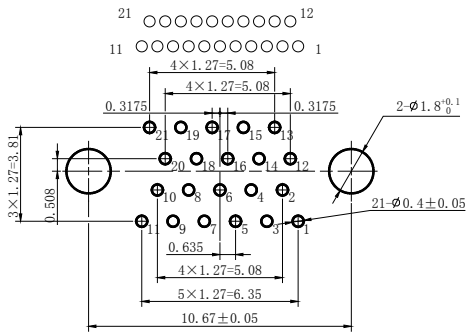
Suggested PCB Layout



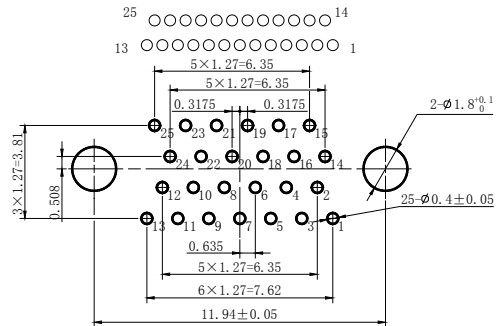
R06-221-S1/S2/S3-9PI-TH



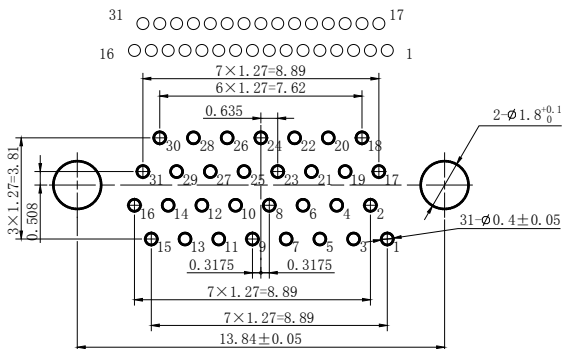
R06-221-S1/S2/S3-15PI-TH



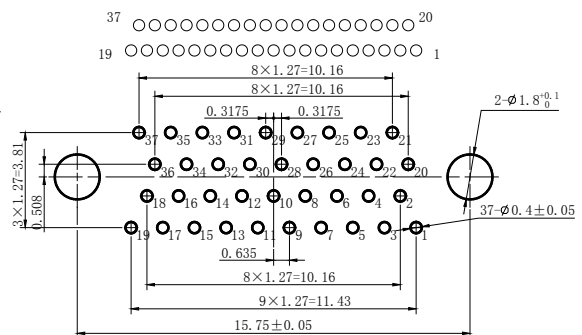
R06-221-S1/S2/S3-21PI-TH



R06-221-S1/S2/S3-25PI-TH



R06-221-S1/S2/S3-31PI-TH




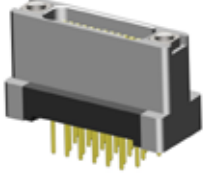
R06-221-S1/S2/S3-37PI-TH

Remark: All dimensions are in mm



R06 Straight to PCB Receptacle Series

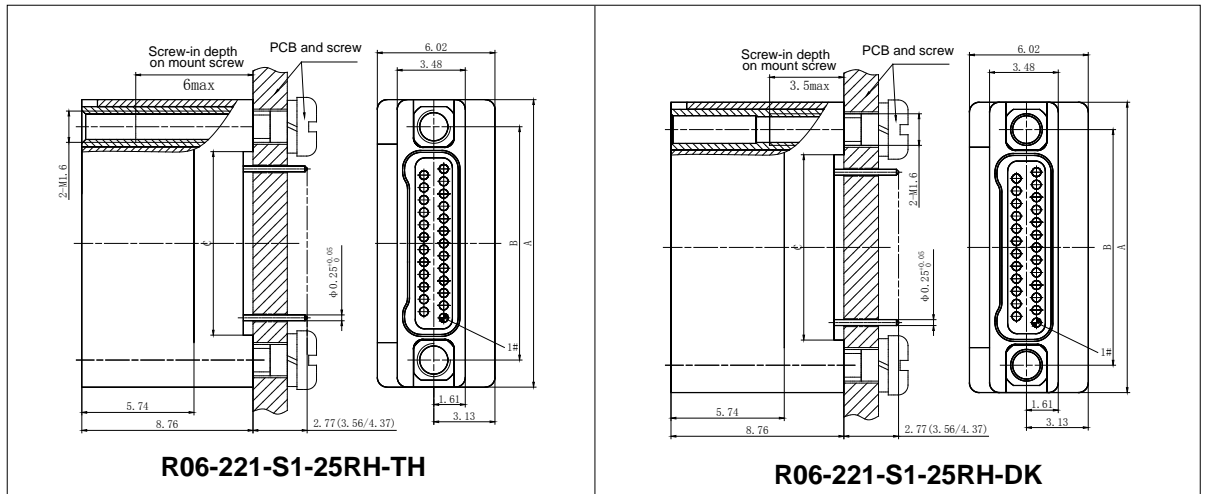
Order marks

Series	R06	-2	2	1	-S	1	-25	RH	-TH	 <p>R06-221-S1-25RH-TH</p>  <p>R06-221-S1-25RH-DK</p>
Contact row:										
2 — tow rows										
Shell plating:										
2 — nickel plating										
Contact plating:										
1 — gold plating										
Tail termination type :										
S — straight to pcb										
Tail length:										
1 — 2.77mm										
2 — 3.56mm										
3 — 4.37mm										
Contact number:										
9、15、21、25、31、37、51、65、69										
Contact type :										
RH — socket in receptacle										
Locking type:										
DK — guide hole TH — connect nut										

Remark

- R06-221-S*-**RH-TH usually mated with plug which have locking screw, R06-221-S*-**PI-DK usually mated with plug which have guide pin
- 3 kinds of tail length, customized produce for other length

Outline dimension

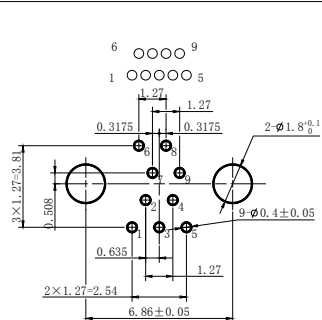
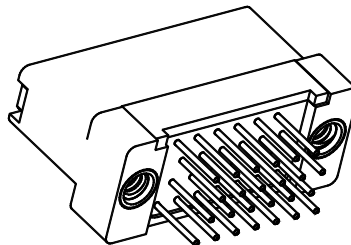
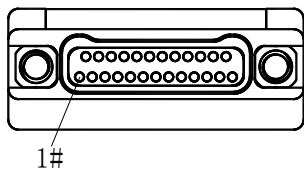


Pin count	Dimension			Pin count	Dimension			Pin count	Dimension		
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9pins	9.63	6.86	4.31	15pins	11.53	8.76	6.22	21pins	13.44	10.67	8.13
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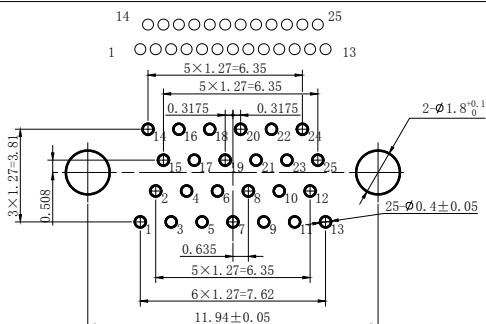
Remark: All dimensions are in mm



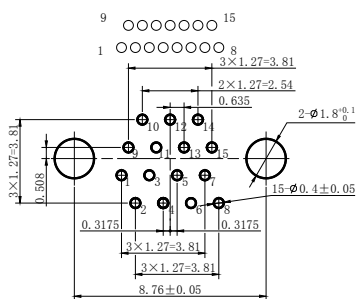
Suggested PCB Layout



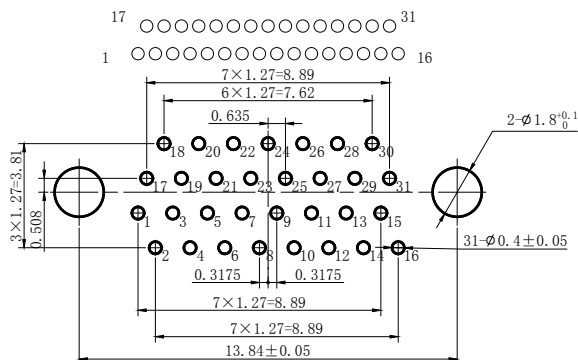
R06-221-S1/S2/S3-9RH-TH



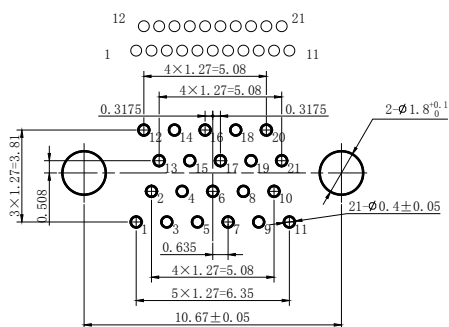
R06-221-S1/S2/S3-25RH-TH



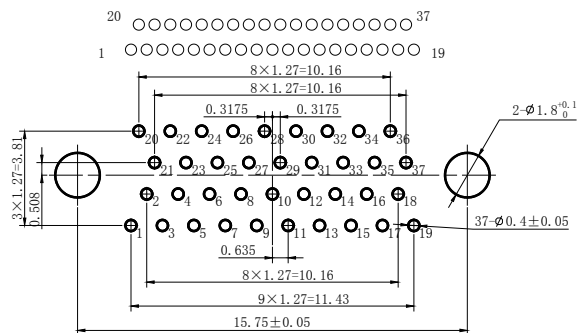
R06-221-S1/S2/S3-15RH-TH



R06-221-S1/S2/S3-31RH-TH



R06-221-S1/S2/S3-21RH-TH

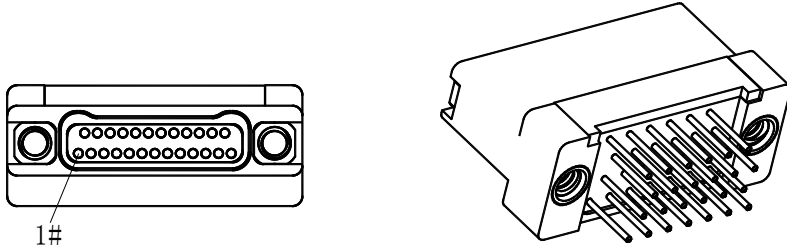


R06-221-S1/S2/S3-37RH-TH

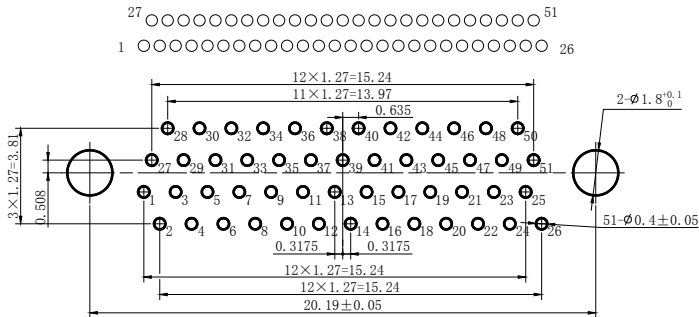
Remark: All dimensions are in mm



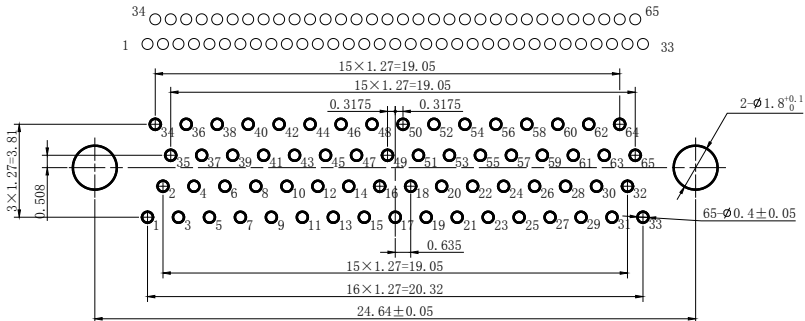
Suggested PCB Layout



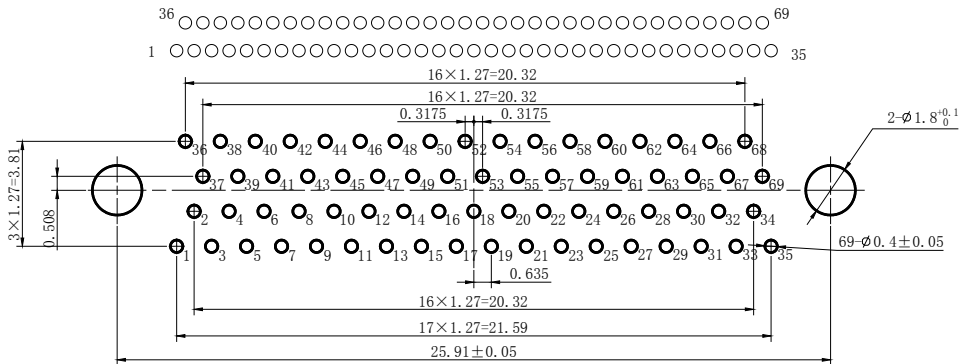
1#



R06-221-S1/S2/S3-51RH-TH



R06-221-S1/S2/S3-65RH-TH



R06-221-S1/S2/S3-69RH-TH

Remark: All dimensions are in mm