



MIL-DTL-32139 Nano-D Connectors

R06 Series Straight to PCB Connectors

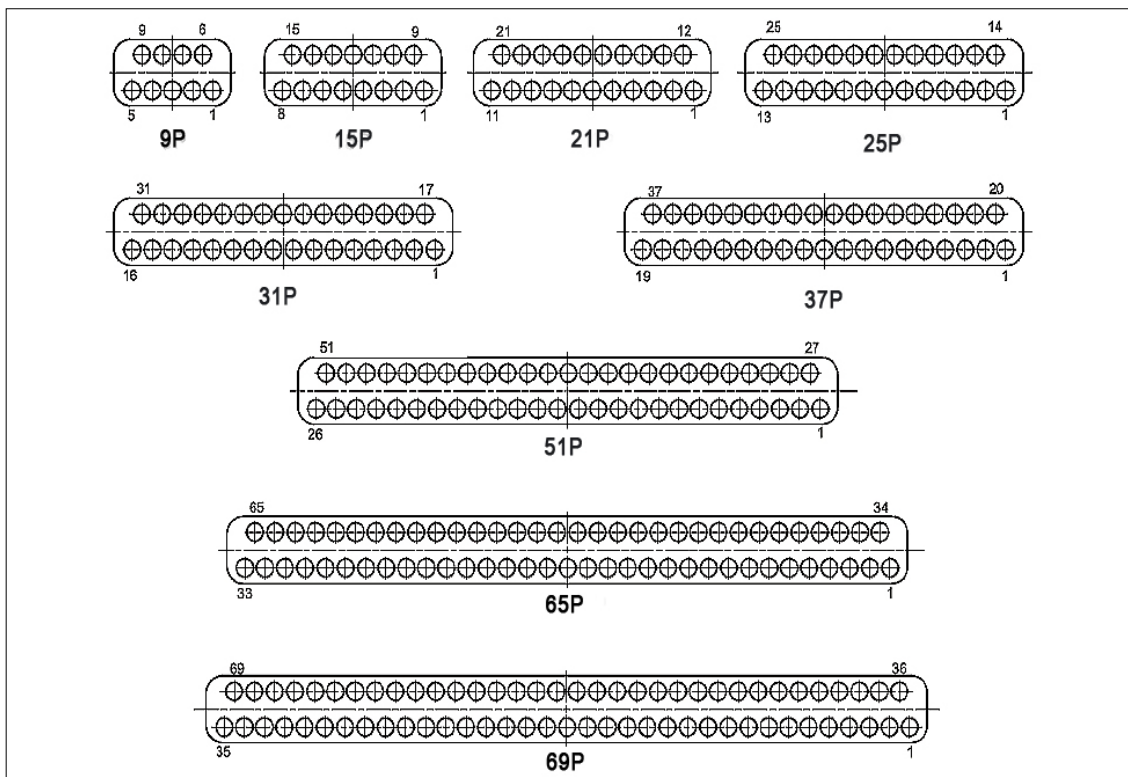
Brief Introduction

- Contacts: 9, 15, 21, 25, 31, 37, 51, 65, 69 pins
- Twist flexible nano pin (twist pin), 0.635mm pitch, nano 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, nano, 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.
- The sectional area of crimp conductive cable is 0.035mm^2 .
- Undefined tolerance is $\pm 0.13\text{mm}$

Specifications

- | | | | |
|--|---------------------------------|--------------------------|----------------------------------|
| ■ 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 $0.4\text{G}^2/\text{Hz}$, r.m.s value of total acceleration 23.1G | | | |

Contact Arrangements

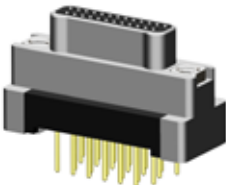
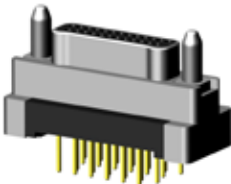


Remark: The above layout is view from plug mate side end face.



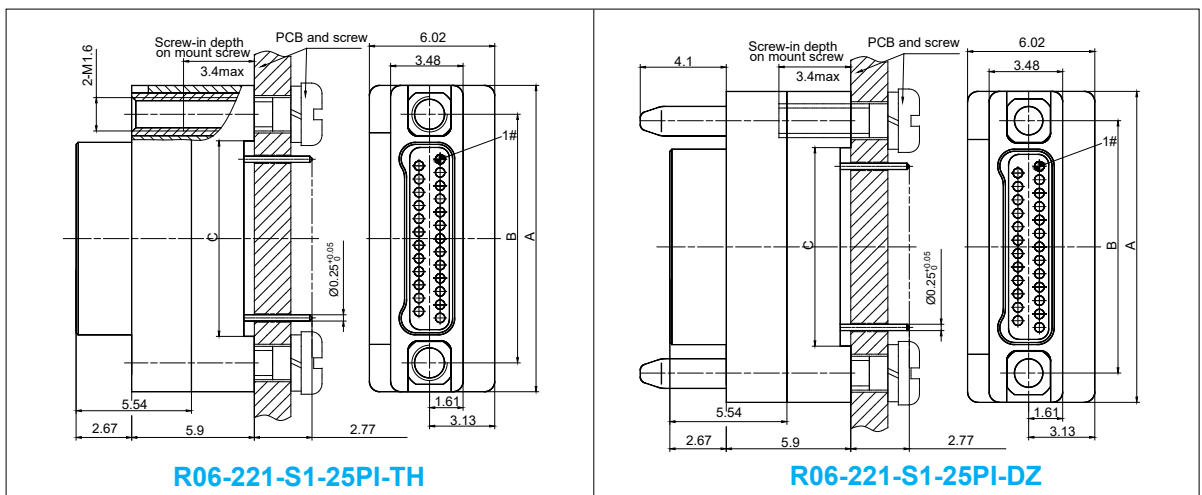
R06 Series Straight to PCB Plug Connectors

How To Order

Series	R06	-2	2	1	-S	1	-25	PI	-TH	
Contact Row:										R06-221-S1-25PI-TH
2—Two Rows										
Shell Plating:										
2—Nickel Plating										
Contact Plating:										R06-221-S1-25PI-DZ
1—Gold Plating										
Tail Termination Type:										
S—Straight to PCB										
Tail Length:										
1—2.77mm 2—3.56mm 3—4.37mm										
Contact Number:										
9,15,21,25,31,37,51,65,69pins										
Contact Type:										
PI—Pin in Plug										
Locking Hardware Type:										
DZ—Guide Pin TH—Connect Nut										

Remark: 1. R06-221-S*-**PI-TH usually matches with receptacle which have locking screw.
2. R06-221-S*-**PI-DZ usually matches with receptacle which have guide hole.
3. Three kinds of tail length, and customized length.

Outline Dimensions

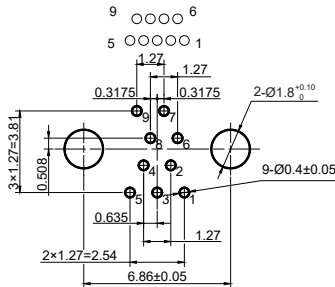
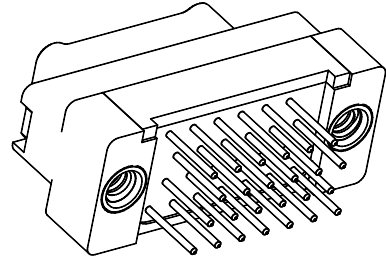
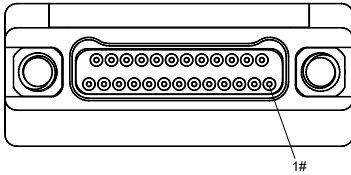


Pin Count	Dimensions			Pin Count	Dimensions			Pin Count	Dimensions		
	A	B	C		A	B	C		A	B	C
9pins	9.63	6.86	4.31	15pins	11.53	8.76	6.22	21pins	13.44	10.67	8.13
25pins	14.71	11.94	9.40	31pins	16.61	13.84	11.30	37pins	18.52	15.75	13.21
51pins	22.96	20.19	17.65	65pins	27.41	24.64	22.10	69pins	28.68	25.91	23.37

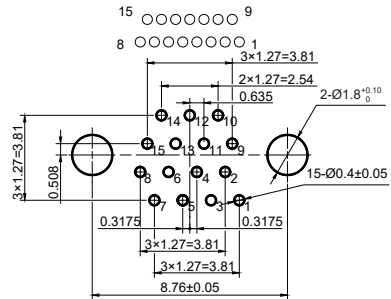
Remark: All dimensions are in mm.



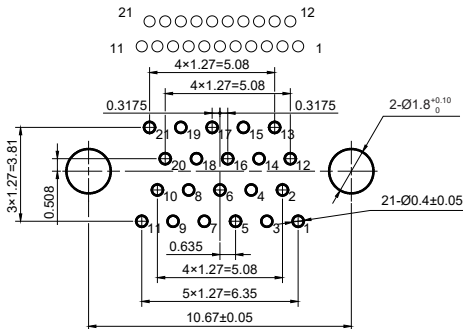
R06 Series Straight to PCB Plug Connectors - PCB Layout



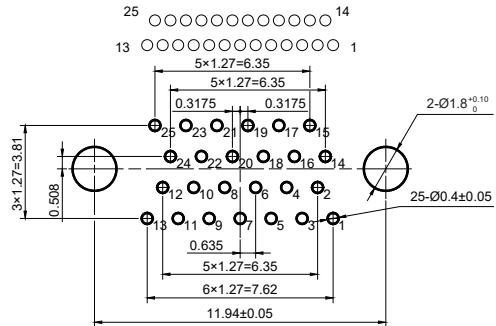
R06-221-S1/S2/S3-9PI-TH



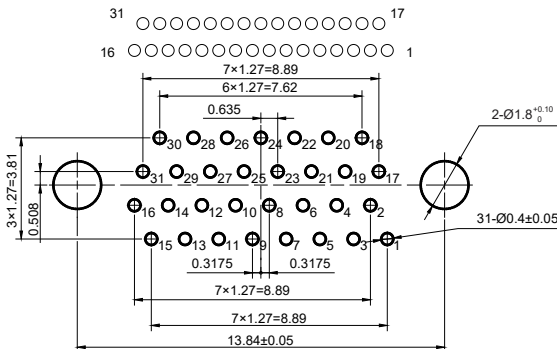
R06-221-S1/S2/S3-15PI-TH



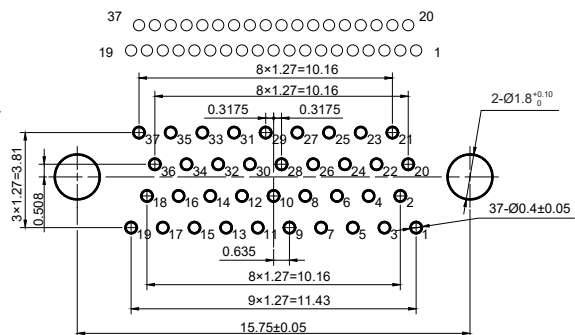
R06-221-S1/S2/S3-21PI-TH



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



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

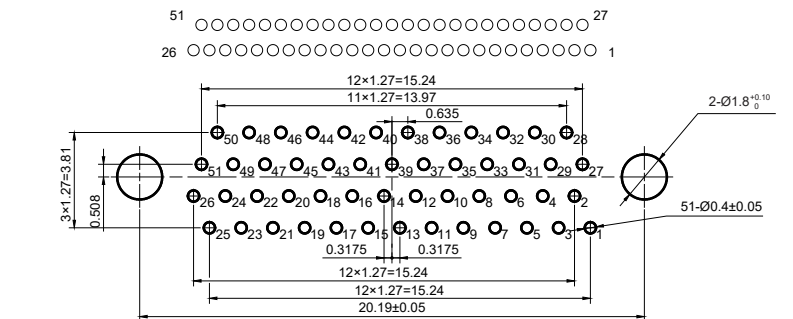
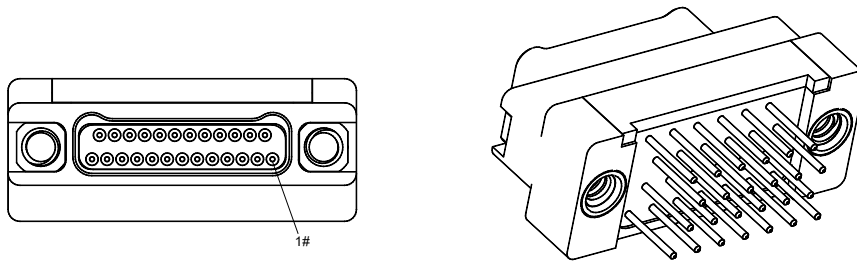


R06-221-S1/S2/S3-37PI-TH

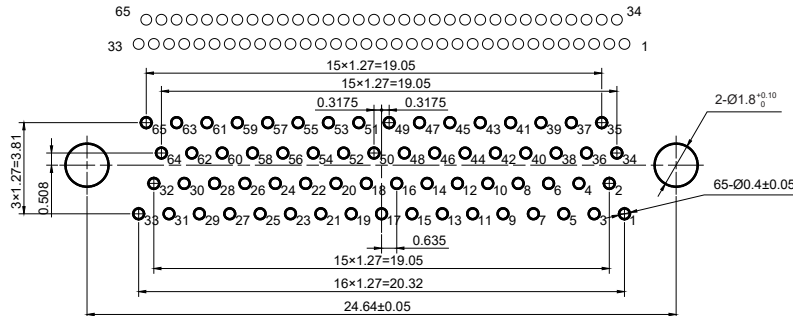
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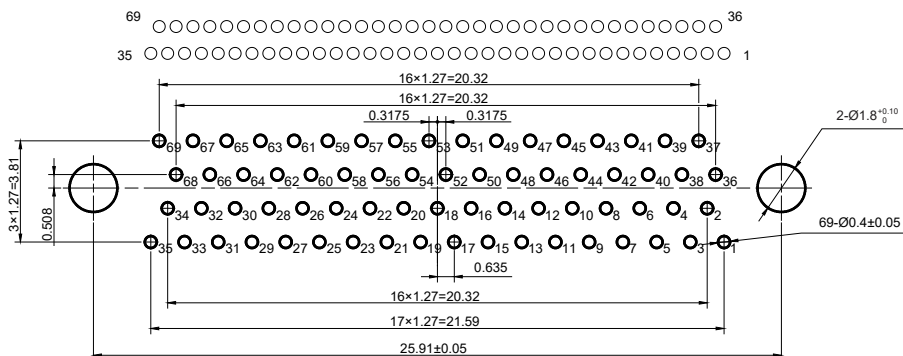
R06 Series Straight to PCB Plug Connectors - PCB Layout



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



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

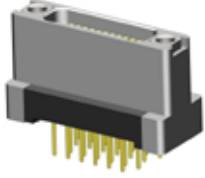


R06-221-S1/S2/S3-69PI-TH

Remark: All dimensions are in mm.

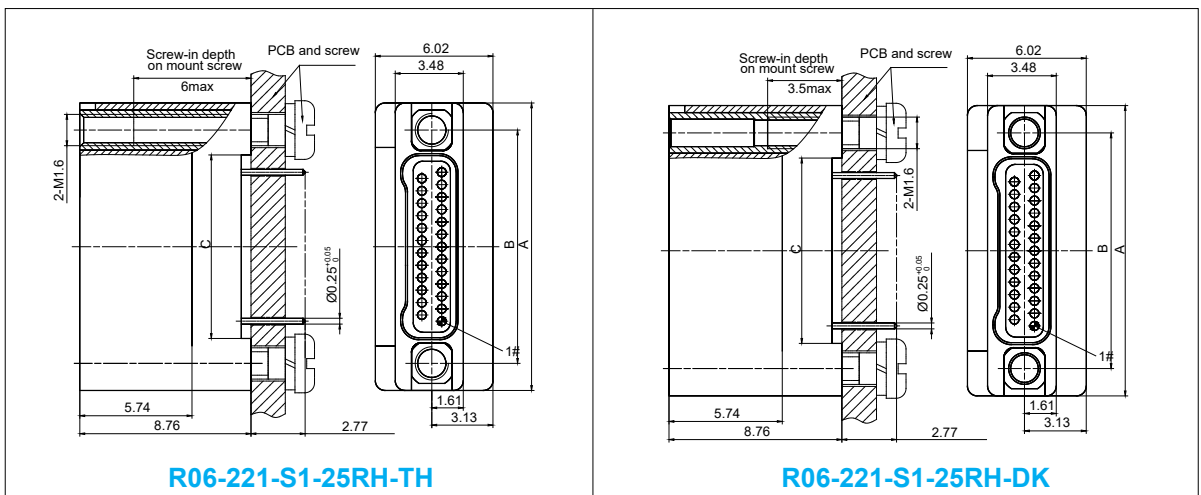
R06 Series Straight to PCB Receptacle Connectors

How To Order

Series	R06	-2	2	1	-S	1	-25	RH	-TH	
Contact Row:										
2—Two 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:										
9,15,21,25,31,37,51,65,69pins										
Contact Type:										
RH—Socket in Receptacle										
Locking Hardware Type:										
DK—Guide Hole TH—Connect Nut										

Remark: 1. R06-221-S*-**RH-TH usually matches with plug which have locking screw.
2. R06-221-S*-**RH-DK usually matches with plug which have guide pin.
3. Three kinds of tail length, and customized length.

Outline Dimensions

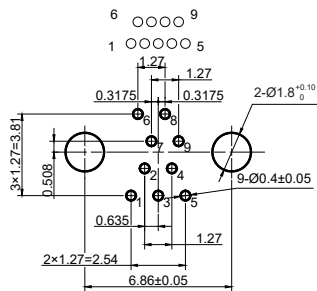
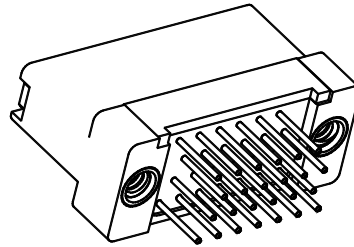
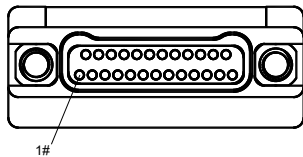


Pin Count	Dimensions			Pin Count	Dimensions			Pin Count	Dimensions		
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9pins	9.63	6.86	4.31	15pins	11.53	8.76	6.22	21pins	13.44	10.67	8.13
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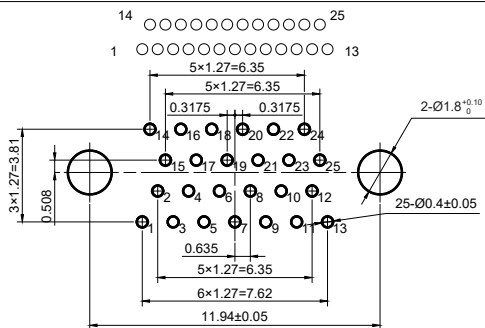
Remark: All dimensions are in mm.



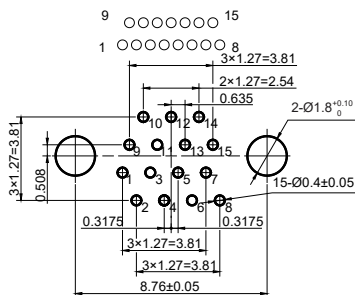
R06 Series Straight to PCB Receptacle Connectors - PCB Layout



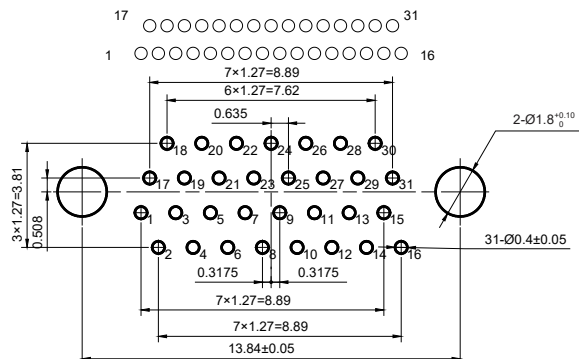
R06-221-S1/S2/S3-9RH-TH



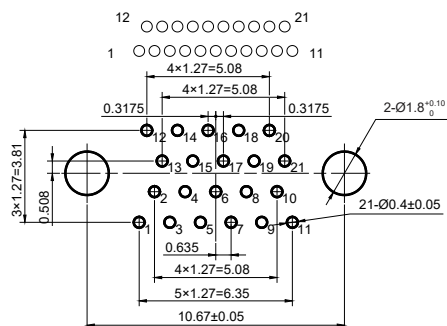
R06-221-S1/S2/S3-25RH-TH



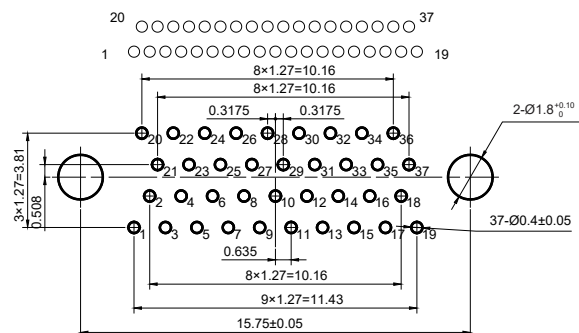
R06-221-S1/S2/S3-15RH-TH



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



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

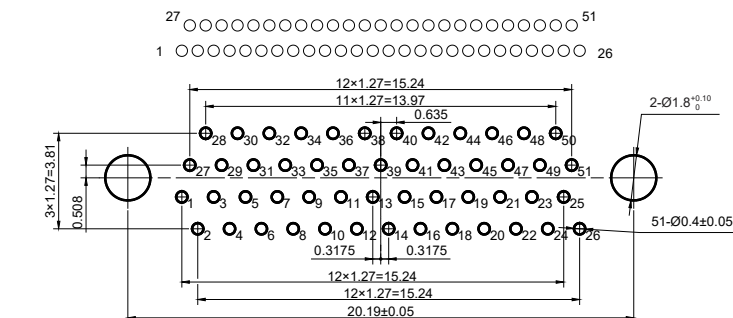
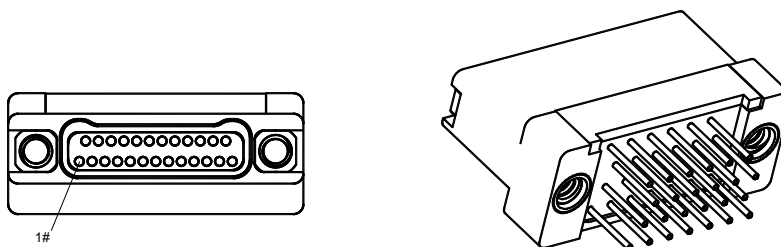


R06-221-S1/S2/S3-37RH-TH

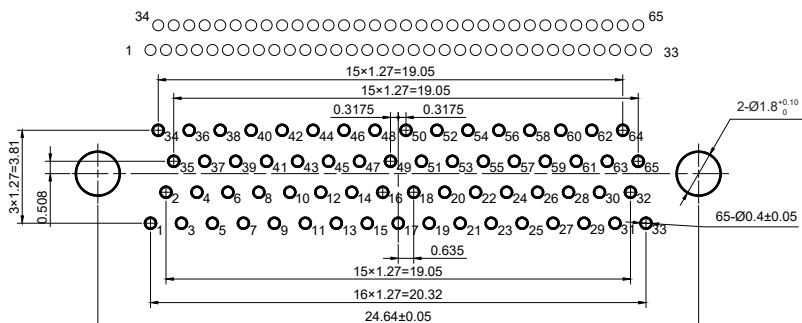
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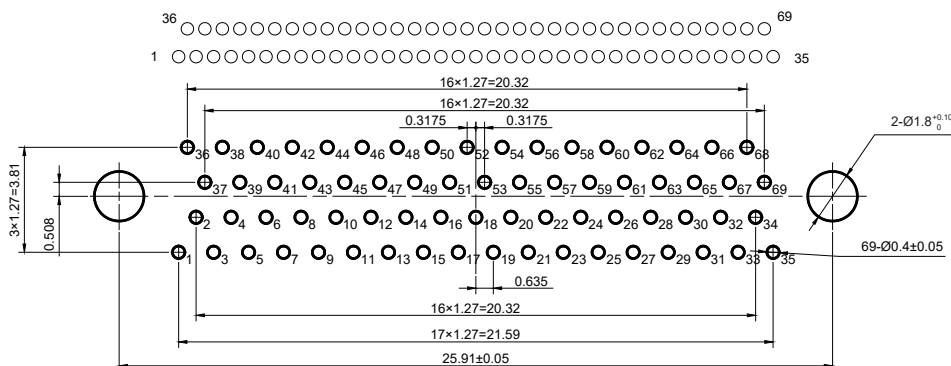
R06 Series Straight to PCB Receptacle Connectors - PCB Layout



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.