

Company Profile:



Sunkye International Co., Limited.(Connector) Business Group, with sixty five years of experience, specializes in designing and producing connectors, related components and cables. A wide range of connector products, twist pin connector, optical fiber connector, RF coaxial connector, separable connector, custom and application-

Company profile

specific connector, etc, which are widely used in military area: aerospace, aviation, electrical, ship-building, defense system, etc and civil area: communication, telecom, automotive, rail, etc.

Design team focuses on meeting customers' requirement with continuous innovative technology, manufacture team provides high quality products by utilizing advanced equipments in standardized processes to ensure customers' benefits.

Sunkye is ISO 9001 certified, UL, VDE, CE certification passed, and ensures products quality by testing in realistic conditions with advanced test facilities, professional test employees.

Sunkye team is committed to offering high quality products, best service, prompt delivery and competitive price for you.

Manufacture Equipment:

'JWF "YJT \$/\$ "(*& &%.. 40%*\$, 8&%
(7FDUPS /FUXPSL "OBMZ[FST 7B
NFOU &RVJQNFou (MBTT TJOUFSF
JOH \$FOUFS)JHI 7FMPDJUZ 3BN .E
BOE \$BENJVN 1MBUJOH 1SPEVDUJP
*OKFDUJPO .BDIJOF 5IFSNPQMBTU
4XJTT "VUPNBUJD -BUIF FUD

Test Facilities:

\$PNQSFIGOTJWF 5FTU *OTUSVN
)VNJEJUZ BOE 7JCSBUJPO &YQFS
QFSBUVSF BOE 4IPDL MBZFS UIJD
.FBTVSFNFou .BDIJOF FUD



0 , / '7/

1DQR ' VXE FRQHFWRUV

SUNKYE



CONTENT

0 ,/ '7/	1DQR 'VXE FRQHFWRUV
5	5LJKW \$QJOH WR 3&% 6HULHV.....2
5	607 6HULHV.....20
5	&ULPS &RQWD.F.W...6HULHV32
5	6WUDLJKW WR 3&% 6HULHV.....47....

MIL-DTL-32139 Nano D-sub Connectors

R06 Right Angle to PCB Series

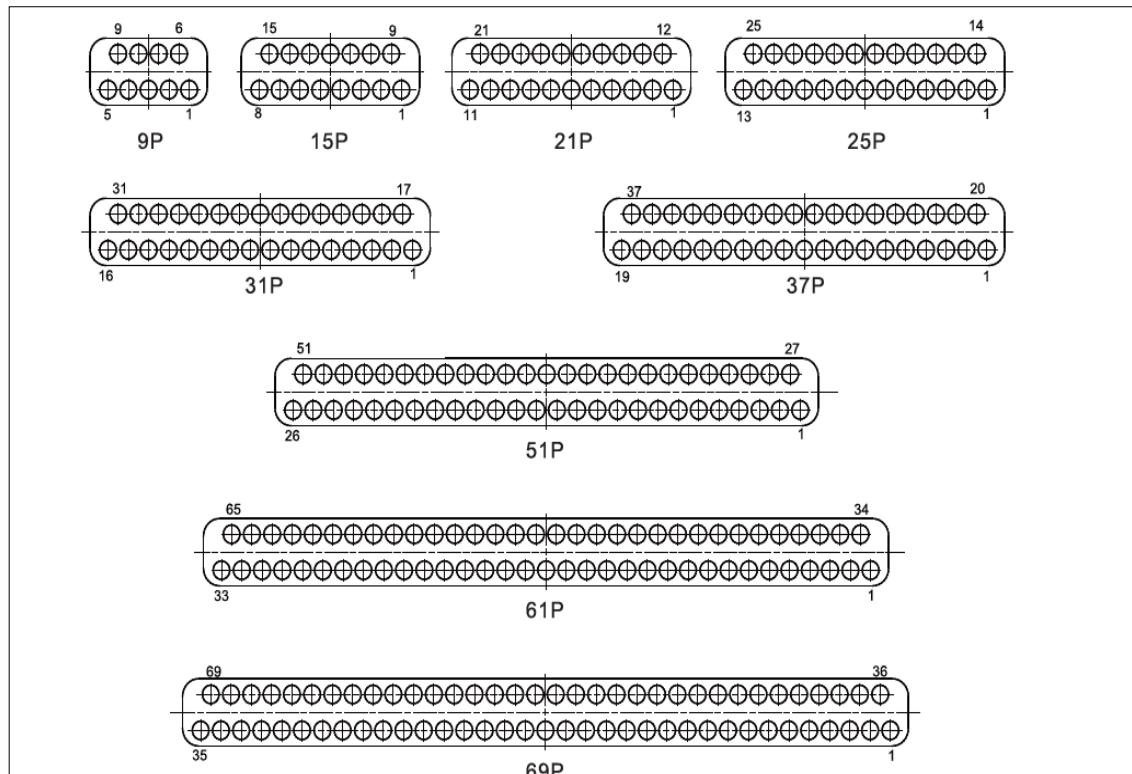
Brief introduction

- ✓ 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:	X	✓ Contact resistance:	A	¶
✓ Vibration:	% V X % V	I O	✓ Insulation resistance:	— » * 3 !
✓ Shock:	I O I O		✓ Dielectric strength:	250V
✓ Rated current:	1A		✓ Machine life:	200 times
✓ Random vibration:	power spectrum density 0.4G /Hz, r.m.s value of total acceleration 23.1G			

Contact layout



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

R06 Right Angle to PCB Plug Series

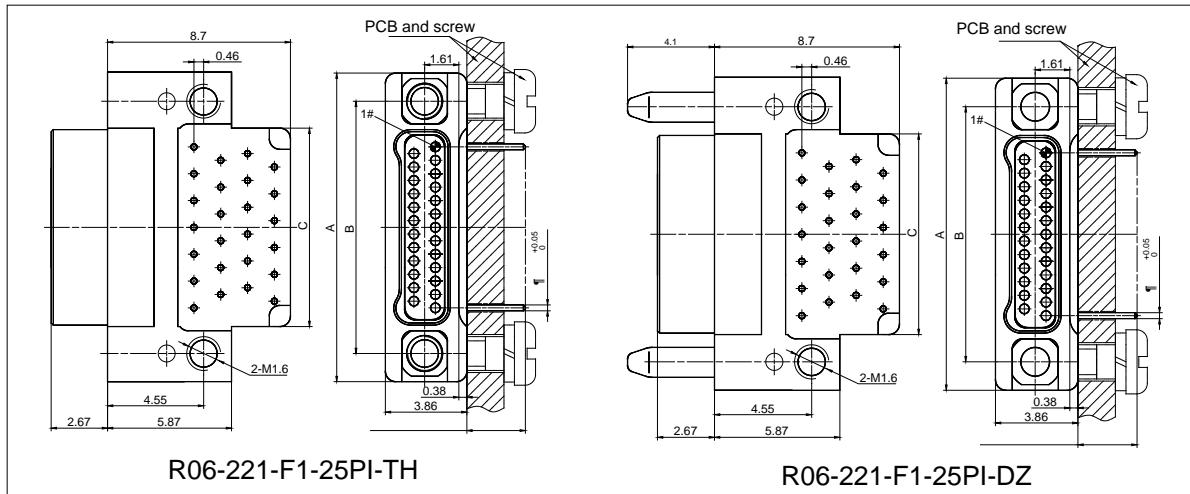
Order marks

5 G T K G U	4	(2 +	6 *	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [RG] (M u T K I J V C P I N G V Q 2 % \$)					R06-221-F1-25PI-TH
6 C K N N G P I V J M O O M O O M O O					
% Q P V C E V P W O D G T A A A A A A A A					
% Q P V C E V V [RG] 2 + M R K P K P R N W I					R06-221-F1-25PI-DZ
. Q E M K P I V [RG] & < M I W K F G R K 6 P M E Q P P G E V P W V					

Remark

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

Outline dimension



R06-221-F1-25PI-TH

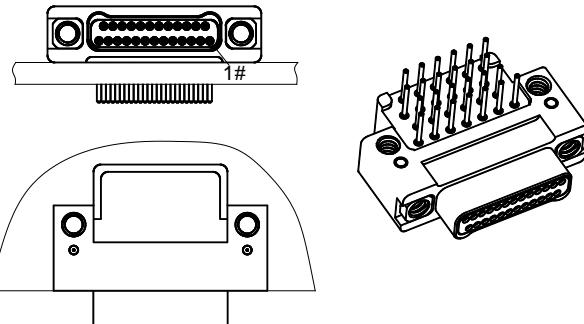
R06-221-F1-25PI-DZ

2 K P	E Q	W P V	& K O G P U K Q P			2 K P	E Q	W P V	& K O G P U K Q P			2 K P	E Q	W P V	& K G P U K Q P		
#	\$	%	#	\$	%	#	\$	%	#	\$	%	#	\$	%	#	\$	%
R K P U			R K P U			R K P U			R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U			R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U			R K P U			R K P U			R K P U		

Remark: All dimensions are in mm



Suggested PCB Layout



The technical drawing illustrates a circular component with various features and dimensions:

- Outer Diameter:** $9\text{-}\phi 4.0\pm 0.05$
- Inner Hole Diameters:** $2\text{-}\phi 1.8^{+0.1}_0$
- Thickness:** 1.27
- Top Edge Offset:** 0.3175
- Bottom Edge Offset:** 0.3175
- Left Edge Offset:** 0.46
- Bottom Edge Offset:** 0.635
- Bottom Edge Offset:** $2\times 1.27 = 2.54$
- Bottom Edge Offset:** 6.86 ± 0.05
- Feature Numbers:** 1 through 9 are marked around the perimeter.

R06-221-F1/F2/F3-9PI-TH

This technical drawing illustrates the layout of features on a mechanical part. Key dimensions include:

- Top row: 15 circles with a diameter of 9 mm, separated by a distance of 3x1.27 = 3.81 mm.
- Middle row: 8 circles with a diameter of 1 mm, separated by a distance of 3x1.27 = 3.81 mm.
- Bottom row: 10 circles with a diameter of 0.635 mm, separated by a distance of 2x1.27 = 2.54 mm.
- Left side: A hole with a diameter of 1.4 mm, located at a height of 0.46 mm from the bottom edge.
- Right side: A hole with a diameter of 1.0 mm, located at a height of 0.46 mm from the bottom edge.
- Bottom center: A hole with a diameter of 0.9 mm, located at a height of 8.76 mm from the bottom edge.
- Bottom row center: A hole with a diameter of 0.4 mm, located at a height of 0.3175 mm from the bottom edge.
- Bottom row left: A hole with a diameter of 0.4 mm, located at a height of 0.3175 mm from the bottom edge.
- Bottom row right: A hole with a diameter of 0.4 mm, located at a height of 0.3175 mm from the bottom edge.

R06-221-F1/F2/F3-15PI-TH

Technical drawing of a mechanical part with the following dimensions and tolerances:

- Outer diameter: $21 \text{ } \phi 0.4 \pm 0.05$
- Inner hole diameter: $2 \text{ } \phi 1.8 \pm 0.1$
- Width: 10.67 ± 0.05
- Height: $3x 2.7 = 8.1$
- Thickness: 0.46
- Bottom width: $5x 1.27 = 6.35$
- Bottom height: 0.635
- Top width: $5x 1.27 = 5.08$
- Top height: 0.3175
- Bottom top width: $4x 1.27 = 5.08$
- Bottom top height: 0.3175
- Top top width: $4x 1.27 = 5.08$
- Top top height: 0.3175
- Bottom hole diameters: $\phi 1.9, \phi 1.8, \phi 1.6, \phi 1.4, \phi 1.2$
- Top hole diameters: $\phi 1.9, \phi 1.8, \phi 1.6, \phi 1.4, \phi 1.2$
- Bottom hole positions: $(1, 2), (3, 4), (5, 6), (7, 8), (9, 10)$
- Top hole positions: $(1, 2), (3, 4), (5, 6), (7, 8), (9, 10)$

R06-221-F1/F2/F3-21PI-TH

R06-221-F1/F2/F3-25PI-TH

Technical drawing of a circular part with 31 holes. The outer diameter is $31\text{-}\phi 0.4\pm 0.05$. The inner diameter is $2\text{-}\phi 1.8^{+0.0}_{-0.1}$. The distance from the center to the outer edge is 13.84 ± 0.05 . The drawing shows two concentric circles of holes. The outer ring has 16 holes, and the inner ring has 15 holes. Hole numbers are indicated around the perimeter. Key dimensions include:

- Outer diameter: $31\text{-}\phi 0.4\pm 0.05$
- Inner diameter: $2\text{-}\phi 1.8^{+0.0}_{-0.1}$
- Distance from center to outer edge: 13.84 ± 0.05
- Distance from center to inner edge: $3x1.27=3.81$
- Radius of outer ring: 0.46
- Radius of inner ring: 0.3175
- Width of outer hole row: $7\times 1.27=8.89$
- Width of inner hole row: $7\times 1.27=8.89$
- Width of outer hole row: 13.84 ± 0.05
- Width of inner hole row: $7\times 1.27=8.89$
- Width of outer hole row: $6x1.27=7.62$
- Width of inner hole row: 0.635

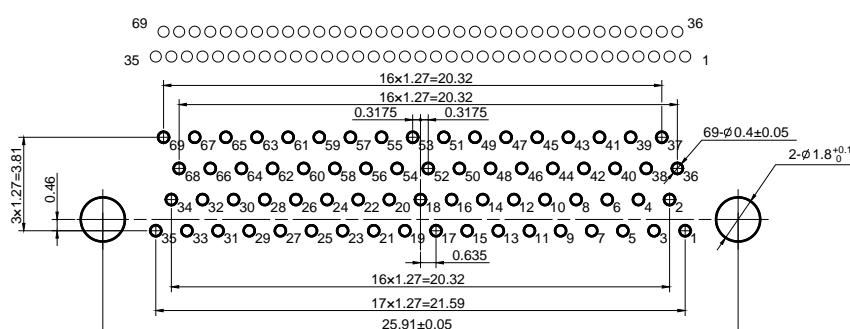
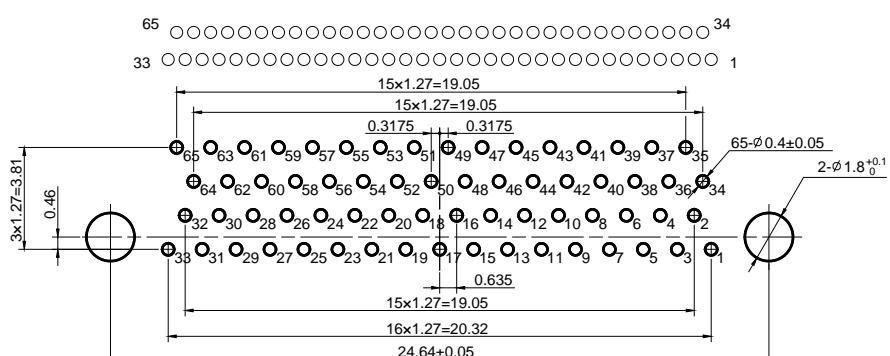
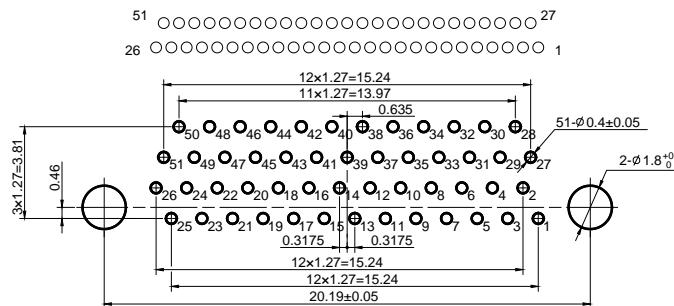
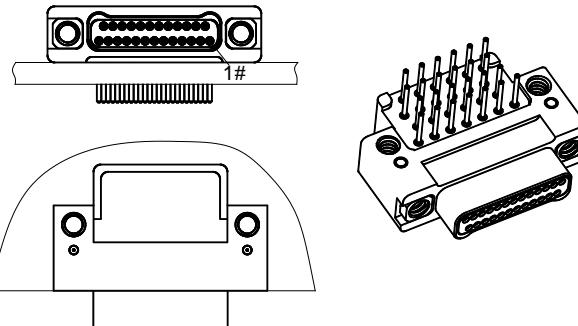
R06-221-F1/F2/F3-31PI-TH

This technical drawing shows a circular part with 37 holes arranged in a specific pattern. The outer diameter is 20. The part is divided into two main sections by a vertical line. The left section has a diameter of 19 and contains 19 holes. The right section has a diameter of 1 and contains 18 holes. The holes are numbered from 1 to 37. A central hole is labeled 37. Other holes are labeled in a clockwise direction starting from the top-left. Dimension lines indicate various features: a total outer diameter of 20, a total inner diameter of 19, and a central hole diameter of 1. Hole spacing is specified as 8x1.27=10.16. There are also horizontal dimensions of 0.3175 and 0.3175, and a vertical dimension of 0.635. A note indicates a tolerance of 37-Ø 0.4±0.05. Two side holes have a dimension of 2-Ø 1.8^{+0.1}₀. A note at the bottom specifies a total width of 15.75±0.05.

R06-221-F1/F2/F3-37PI-TH

Remark: All dimensions are in mm

Suggested PCB Layout



Remark: All dimensions are in mm

R06 Right Angle to Flexible PCB Plug with Locking Screw Series

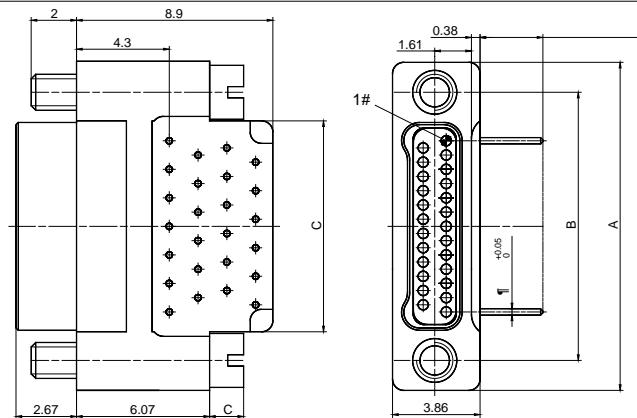
Order marks

5 G T K G U	4	(2 +	, %	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [RG] (M u T K I J V C P I N G V Q 2 % \$)					
6 C K N N G P I V J M O O M O O M O O					
% Q P V C E V P W O D G T A A A A A A A A					
% Q P V C E V V [RG] 2 + M R K P K P R N W I					R06-221-F1-25PI-JC
. Q E M K P I V [RG] . M N Q E M K P I U E T G Y U V T C K I J V U N Q V % F K O G P U K Q P O O , % M N Q E M K P I U E T G Y J G Z P Q V T G E Q O O G P F % F K O G P U K Q P O O					

Remark

- μ 3 kinds of tail length, customized produce for other length
- μ Connector is free mounted, not fixed, usually mated with receptacle which have nut
- μ Tail soldered in the Flexible PCB
- μ Recommended JC(straight slot screw) types of screws, tight by miniature straight screwdriver
- μ When choose JC1(hex) type of screws, tight by 1.27mm subtense hex screwdriver.

Outline dimension



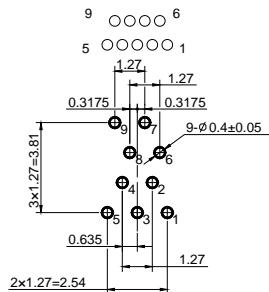
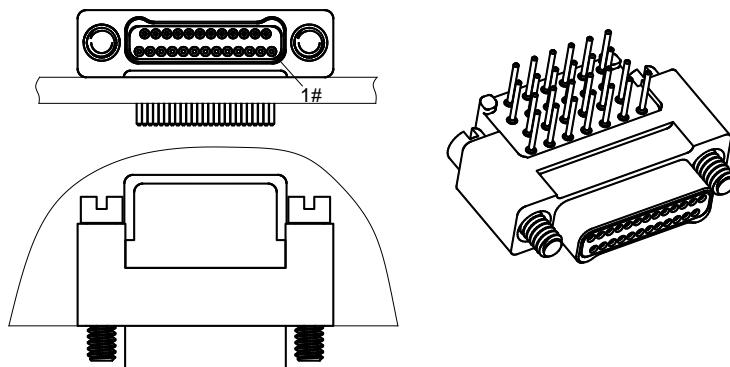
& K O G P U K Q P			& K O G P U K Q P			& K O G P U K Q P		
2 K P E Q	W P V	#	2 K P E Q	W P V	#	2 K P E Q	W P V	#
R K P U		\$	R K P U		\$	R K P U		\$
R K P U		%	R K P U		%	R K P U		%
R K P U			R K P U			R K P U		

Remark: All dimensions are in mm

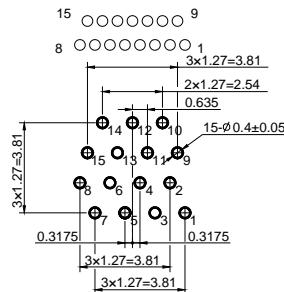


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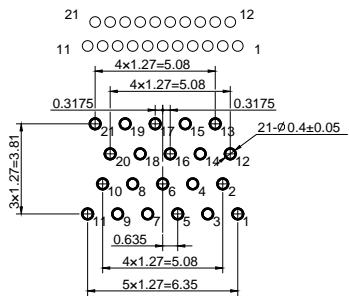
Suggested PCB Layout



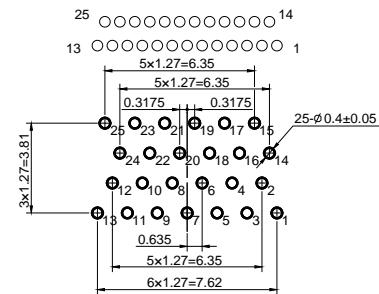
R06-221-F1/F2/F3-9PI-JC



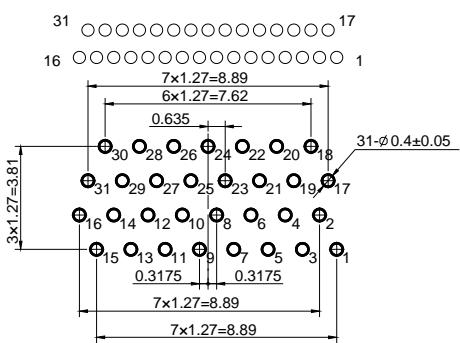
R06-221-F1/F2/F3-15PI-JC



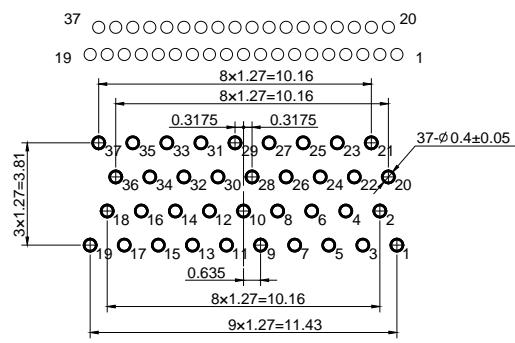
R06-221-F1/F2/F3-21PI-JC



R06-221-F1/F2/F3-25PI-JC



R06-221-F1/F2/F3-31PI-JC



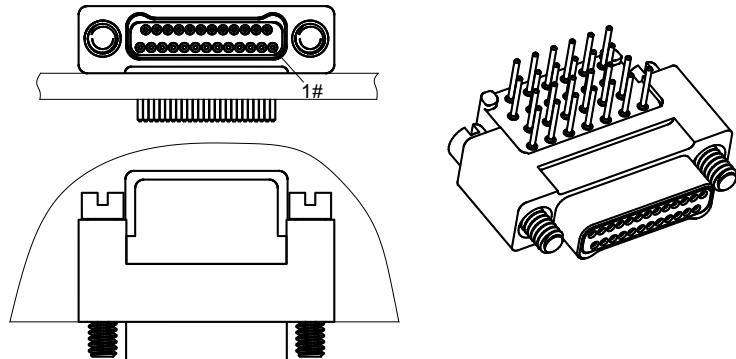
R06-221-F1/F2/F3-37PI-JC

Remark: All dimensions are in mm



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Suggested PCB Layout



Technical drawing showing a circular part with 51 numbered holes. The outer diameter is indicated as $51 - \emptyset 0.4 \pm 0.05$. The distance from the center to the outer edge is labeled 3.81 . Several hole diameters are specified: $12 \times 1.27 = 15.24$, $11 \times 1.27 = 13.97$, 0.635 , 0.3175 , and 0.3175 . The holes are arranged in concentric circles, with the innermost circle having 11 holes and the outermost circle having 26 holes.

R06-221-F1/F2/F3-51PI-JC

R06-221-F1/F2/F3-65PI-JC

Diagram showing a circular array of 69 points arranged in a hexagonal pattern. The array is 16 points wide and 4 points high. Points are numbered from 1 to 69. Dimensions are indicated: 16x1.27=20.32 for the top row, 16x1.27=20.32 for the second row, 0.3175 for the gap between rows, 0.635 for the gap between columns, and 3x1.27=3.81 for the overall width of the array.

R06-221-F1/F2/F3-69PI-JC

Remark: All dimensions are in mm

R06 Right Angle to PCB Receptacle Series

Order marks

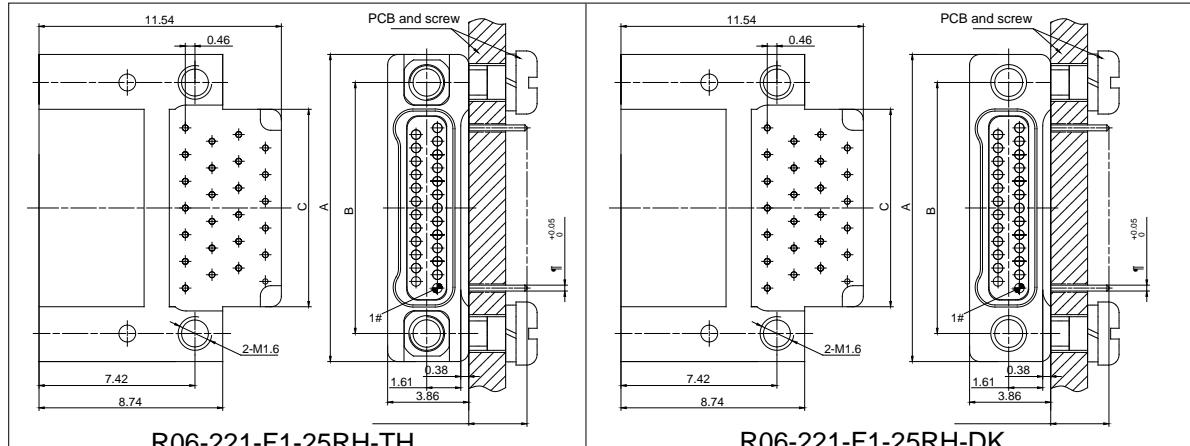
5 G T K G U 4 % Q P V C E V T Q Y M V Q Y T Q Y U 5 J G N N R N C V K P I M P K E M G N R N C V K P I % Q P V C E V R N C V K P I M I Q N F R N C V K P I 6 C K N V G T O K P C V K Q P V [RG] (M u T K I J V C P I N G V Q 2 % \$) 6 C K N N G P I V J M O O M O O M O O % Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä Ä Ä % Q P V C E V V [RG] 4 * M U Q E M G V K P T G E G R V C E N G .Q E M K P I V [RG] & - M I W K F G J Q N G M E Q P P G E V P W V	(4 *	6 *	
				R06-221-F1-25RH-TH

% Q P V C E V V [RG] 4 * M U Q E M G V K P T G E G R V C E N G .Q E M K P I V [RG] & - M I W K F G J Q N G M E Q P P G E V P W V	(4 *		R06-221-F1-25RH-DK
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Remark

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

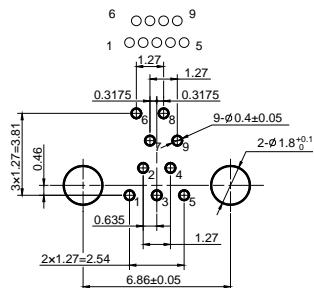
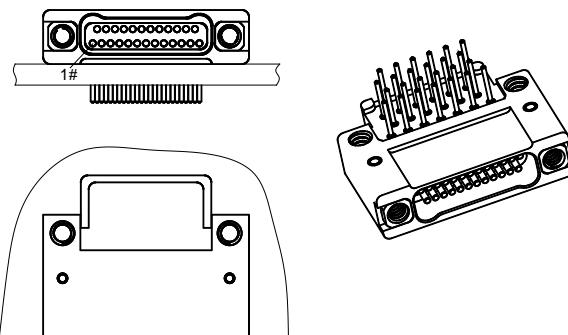
Outline dimension



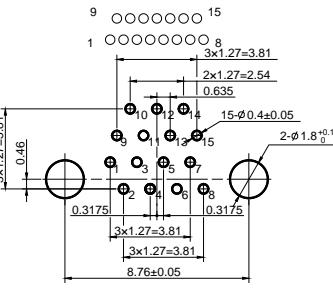
2 K P E Q W P V & K O G P U K Q P			2 K P E Q W P V & K O G P U K Q P			2 K P E Q W P V & K G P U K Q P		
#	\$	%	#	\$	%	#	\$	%
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		

Remark: All dimensions are in mm

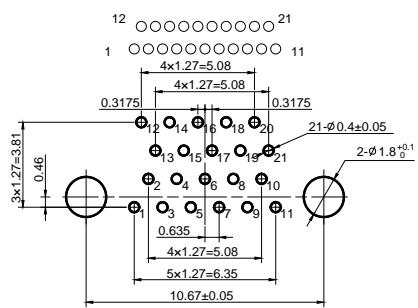
Suggested PCB Layout



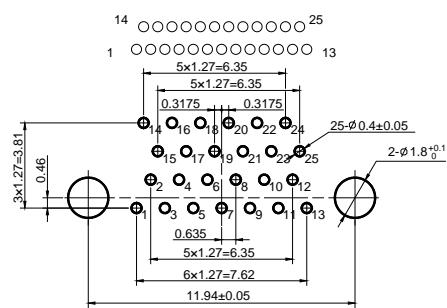
R06-221-F1/F2/F3-9RH-TH



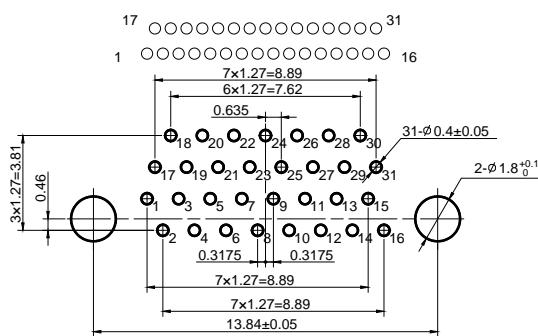
R06-221-F1/F2/F3-15RH-TH



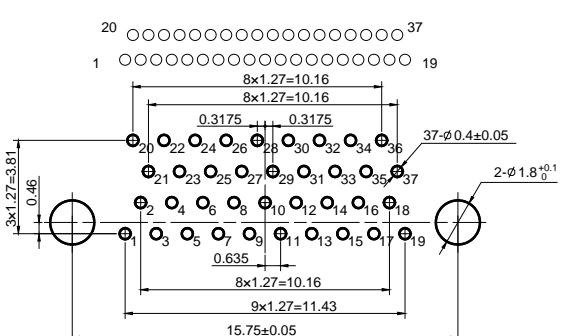
R06-221-F1/F2/F3-21RH-TH



R06-221-F1/F2/F3-25RH-TH



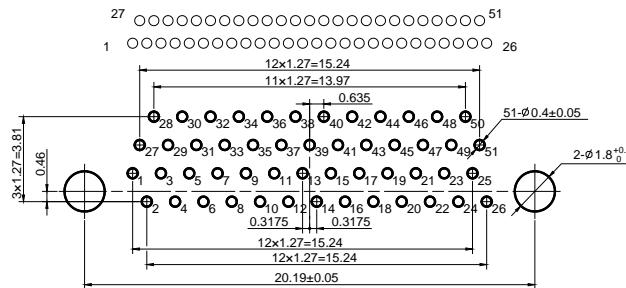
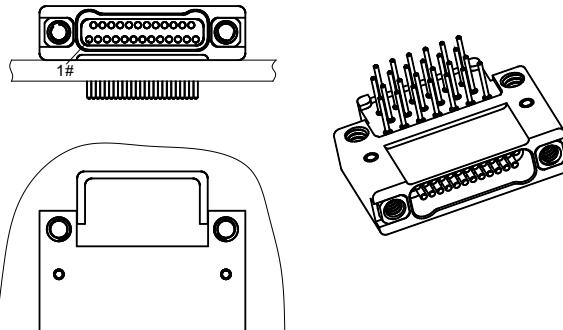
R06-221-F1/F2/F3-31RH-TH



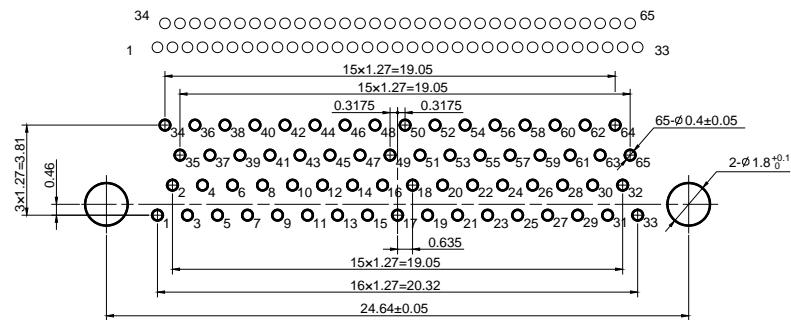
R06-221-F1/F2/F3-37RH-TH

Remark: All dimensions are in mm

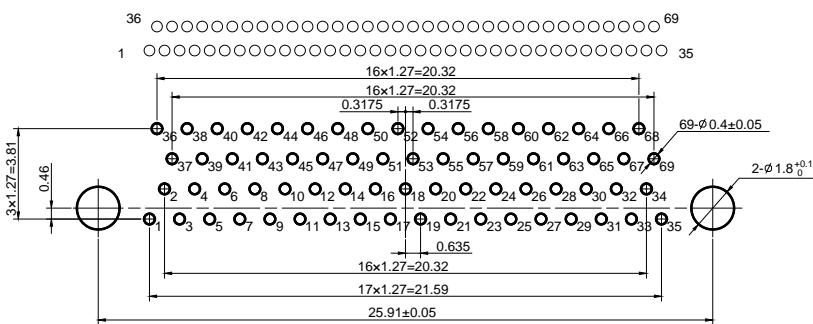
Suggested PCB Layout



R06-221-F1/F2/F3-51RH-TH



R06-221-F1/F2/F3-65RH-TH



R06-221-F1/F2/F3-69RH-TH

Remark: All dimensions are in mm

MIL-DTL-32139 Nano D-sub Connectors

R06 SMT Series

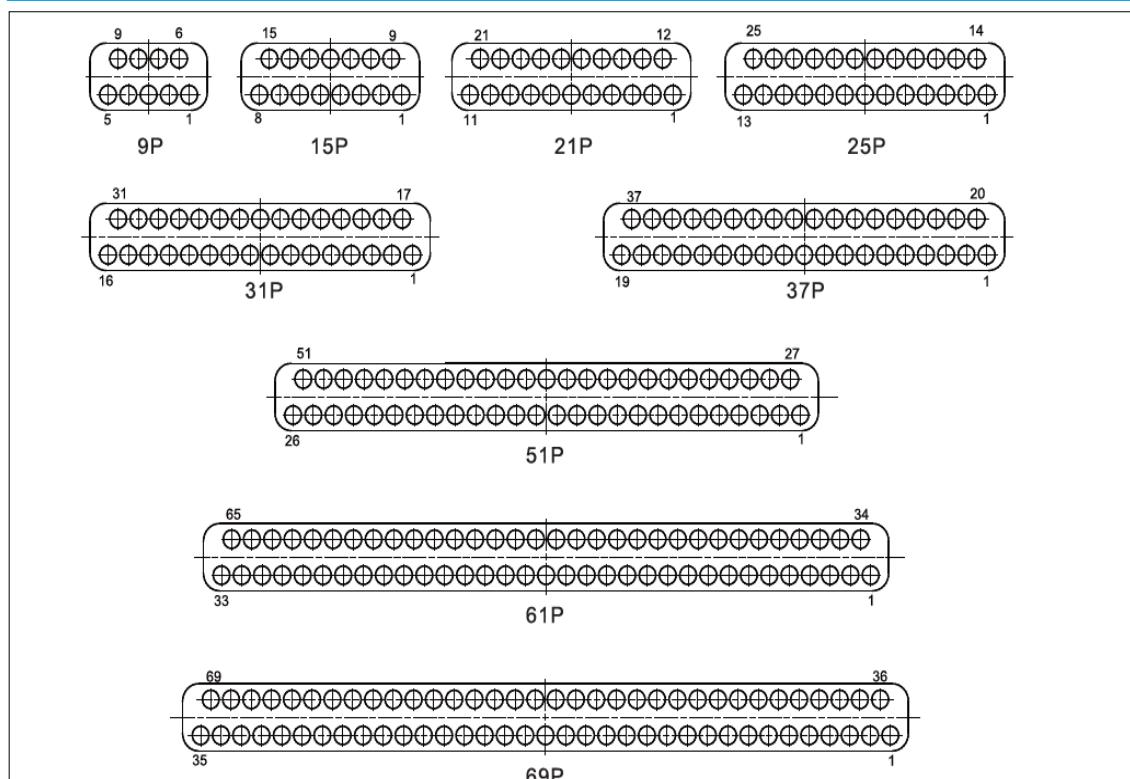
Brief introduction

- ✓ 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:	X	✓ Contact resistance:	A	¶
✓ Vibration:	% V X % V	I O	✓ Insulation resistance:	— » * 3 !
✓ Shock:	I O I O		✓ 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

5 G T K G U	4	/	2 +	6 *
% Q P V C E V T Q Y M V Q Y T Q Y U				
5 J G N N R N C V K P I M P K E M G N R N C V K P I				
% Q P V C E V R N C V K P I M I Q N F R N C V K P I				
6 C K N V G T O K P C V K Q P V [RG /M 5/6				
/ Q W P V K P I U V [NG M X G T V K E C N 5/6 M J Q T K \ Q P V C N 5/6 M U V T C F F N G H N G Z K D N G 5/6				
% Q P V C E V P W O D G T Ã Ä Ã Ä Ã Ä Ã Ä Ã Ä				
% Q P V C E V V [RG 2 + M R K P K P R N W I 4 * M U Q E M G V K P T G E G R V C E N G				
. Q E M K P I E Q O R Q P G P V V [RG , % M N Q E M K P I U E T G Y U V T C K I J V U N Q V , % M N Q E M K P I U E T G Y J G Z P Q V T G E Q O O G P F 6 * M E Q P P G E V P W V 0 * M I W K F G J Q N G Y K V J P W V O Q W P V G F & < M I W K F G R K P 6 * M U Q N F G T P W V 5 * M U Q N F G T I W K F G J Q N G				

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 Plug Series

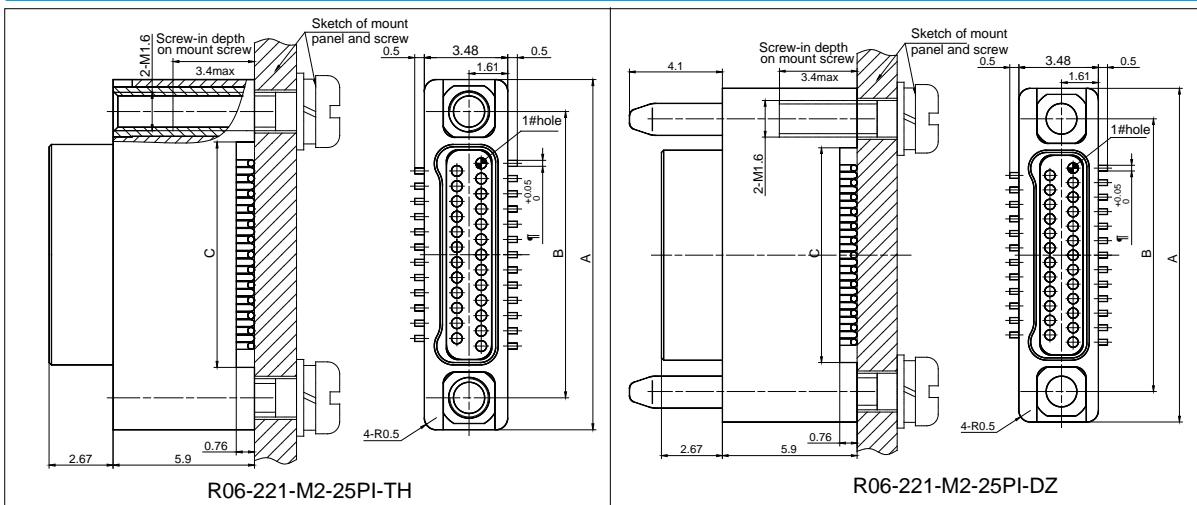
Order marks

5 G T K G U	4	/	2 +	6 *	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [RG] / M 5 / 6					R06-221-M2-25PI-TH
/ Q W P V K P I U V [NG M X G T V K E C N 5 / 6					
% Q P V C E V P W O D G T Ā Ā Ā Ā Ā Ā Ā Ā					
% Q P V C E V V [RG 2 + M R K P K P R N W I					
. Q E M K P I E Q O R Q P G P V V [RG 6 * M E Q P P G E V P W V & < M I W K F G R K P					R06-221-M2-25PI-DZ

Remark

- R06-221-M2-**PI-TH usually mated with receptacle which have locking screw, R06-221-M2-**PI-DZ usually mated with receptacle which have guide hole

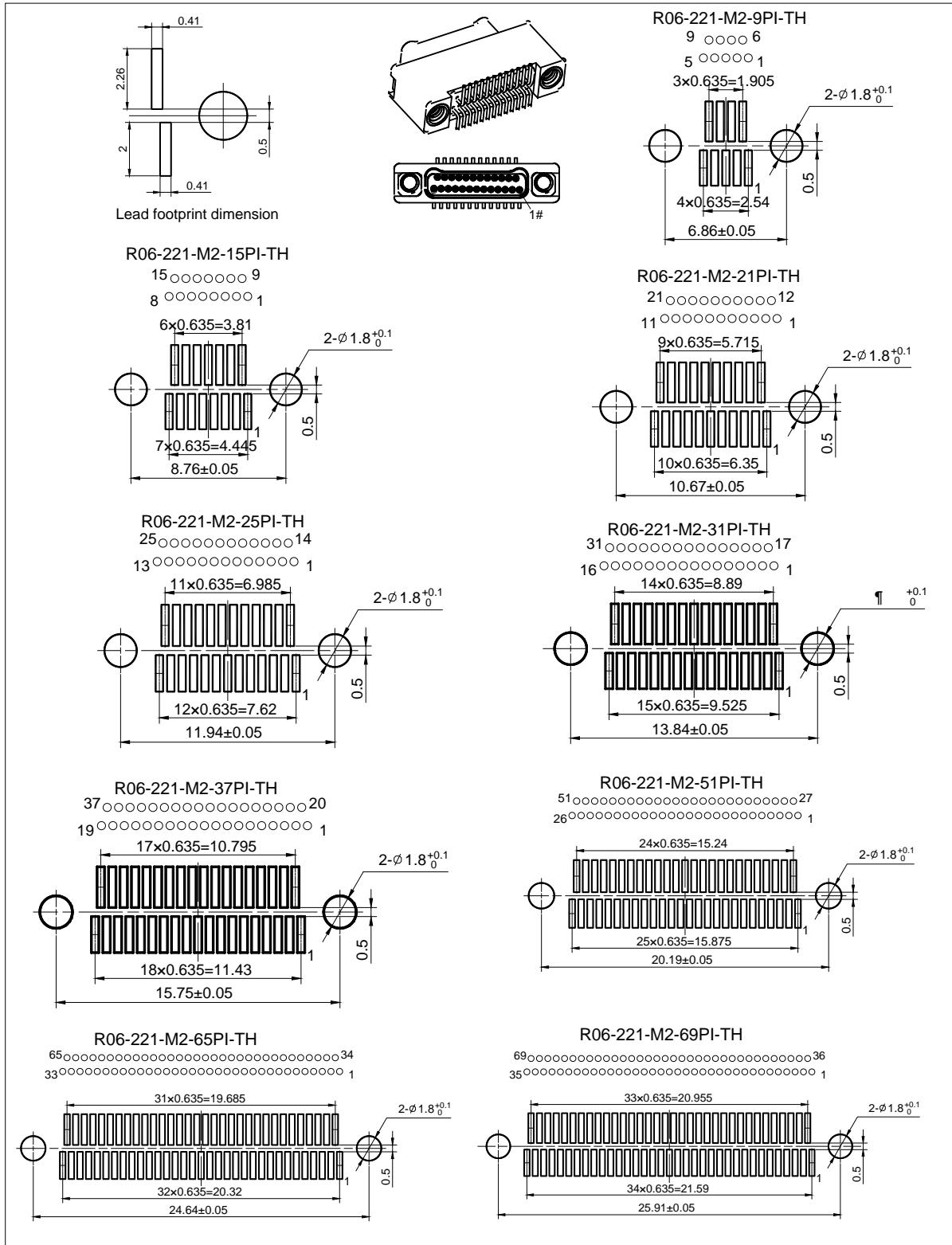
Outline dimension



& K O G P U K Q P			& K O G P U K Q P			& K G P U K Q P		
2 K P E Q W P V #	\$	%	2 K P E Q W P V #	\$	%	2 K P E Q W P V #	\$	%
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		

Remark: All dimensions are in mm

Suggested PCB Layout



Remark: All dimensions are in mm

R06 Vertical SMT Receptacle Series

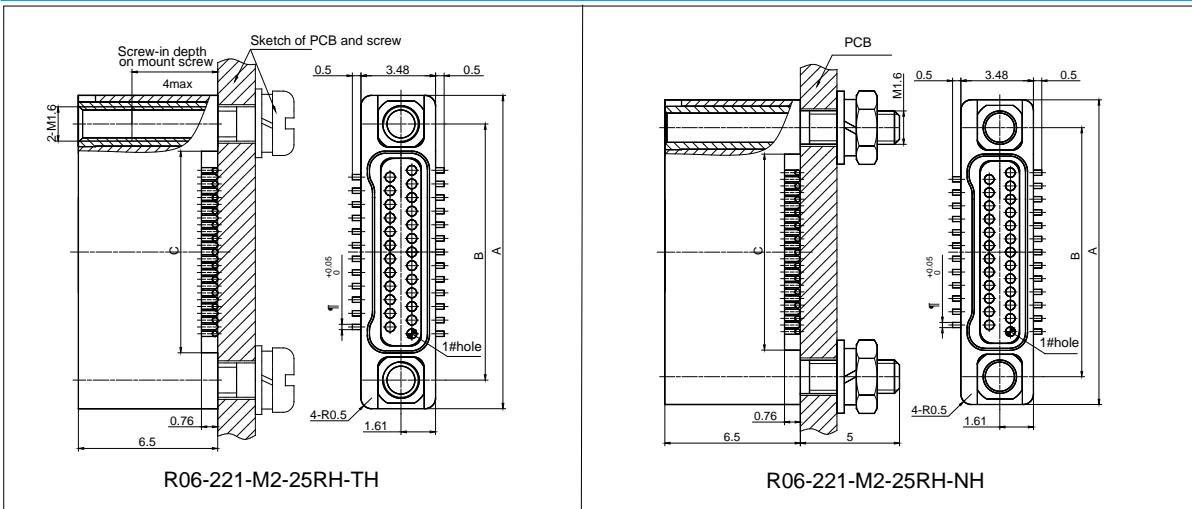
Order marks

5 G T K G U 4	/	4 *	6 *	
% Q P V C E V T Q Y M V Q Y T Q Y U				
5 J G N N R N C V K P I M P K E M G N R N C V K P I				
% Q P V C E V R N C V K P I M I Q N F R N C V K P I				
6 C K N V G T O K P C V K Q P V [RG] / M 5 / 6				R06-221-M2-25RH-TH
/ Q W P V K P I U V [NG] M X G T V K E C N 5 / 6				
% Q P V C E V P W O D G T Ā Ā Ā Ā Ā Ā Ā Ā				
% Q P V C E V V [RG] 4 * M U Q E M G V K P T G E G R V C E N G				
. Q E M K P I E Q O R Q P G P V V [RG] 6 * M E Q P P G E V P W V				R06-221-M2-25RH-NH
0 * M I W K F G J Q N G Y K V J P W V O Q W P V G F				

Remark

- μ R06-221-M2-**RH-TH usually mated with plug which have locking screw, R06-221-M2-**RH-NH usually mated with plug which have guide pin

Outline dimension



& K O G P U K Q P			& K O G P U K Q P			& K G P U K Q P		
2 K P	E Q	W P V	2 K P	E Q	W P V	2 K P	E Q	W P V
#	\$	%	#	\$	%	#	\$	%
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		
R K P U			R K P U			R K P U		

Remark: All dimensions are in mm

R06 Vertical SMT Receptacle with Solder Locking Component Series

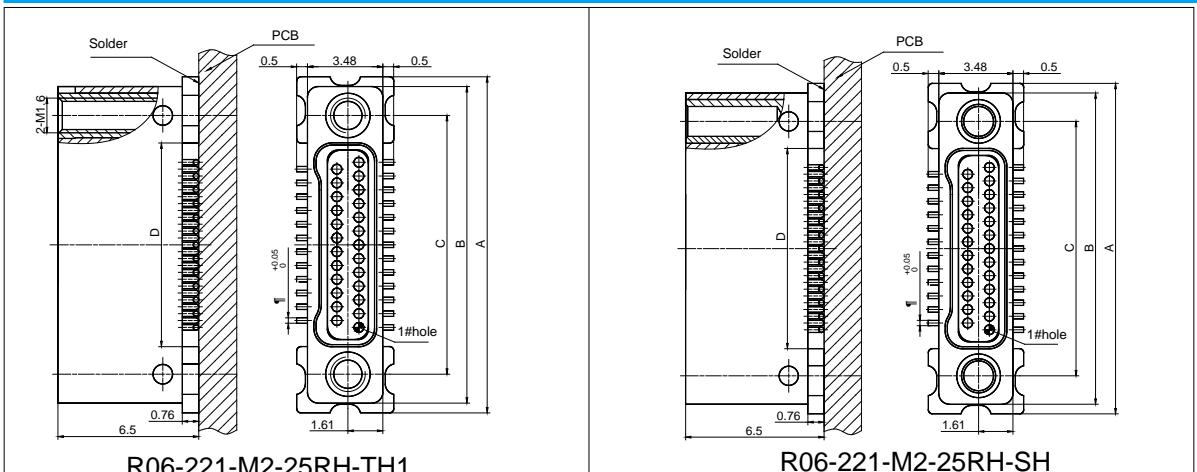
Order marks

5 G T K G U 4	/	4 *	6 *	R06-221-M2-25RH-TH1
% Q P V C E V T Q Y M V Q Y T Q Y U				
5 J G N N R N C V K P I M P K E M G N R N C V K P I				
% Q P V C E V R N C V K P I M I Q N F R N C V K P I				
6 C K N V G T O K P C V K Q P V [R G / M 5 / 6				R06-221-M2-25RH-SH
/ Q W P V K P I U V [N G M X G T V K E C N 5 / 6				
% Q P V C E V P W O D G T Ã Ä Ä Ä Ä Ä Ä Ä				
% Q P V C E V V [R G 4 * M U Q E M G V K P T G E G R V C E N G				
. Q E M K P I E Q O R Q P G P V V [R G 6 * M U Q N F G T P W V				
5 * M U Q N F G T I W K F G J Q N G				

Remark

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

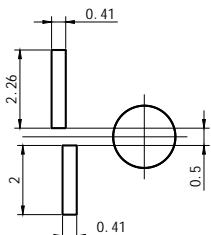
Outline dimension



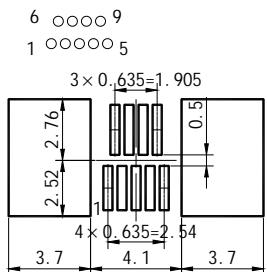
2 K P E Q W P V	& K O G P U K Q P				2 K P E Q W P V	& K O G P U K Q P			
	#	\$	%	&		#	\$	%	&
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				

Remark: All dimensions are in mm

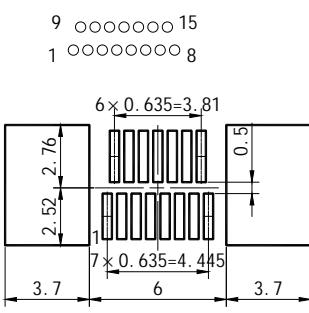
Suggested PCB Layout



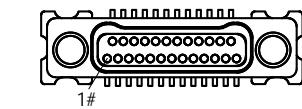
Lead footprint dimension



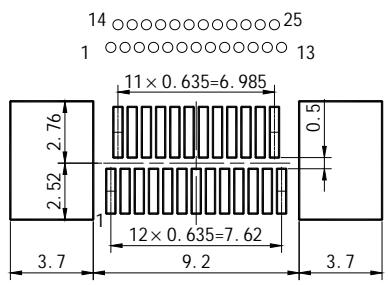
R06-221-M2-9RH-TH1



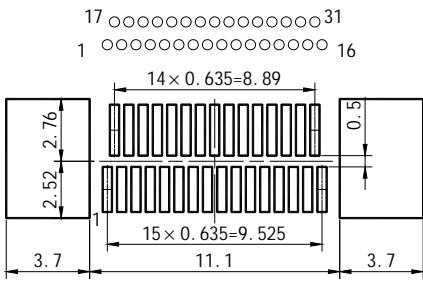
R06-221-M2-15RH-TH1



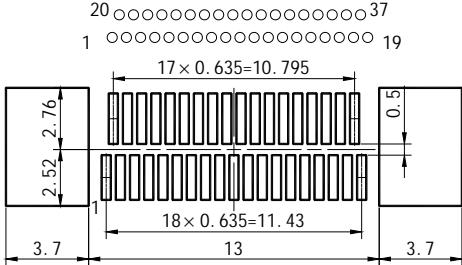
1#



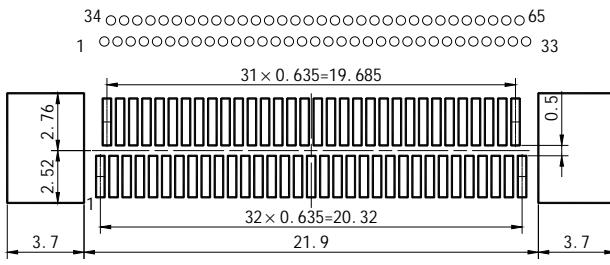
R06-221-M2-25RH-TH1



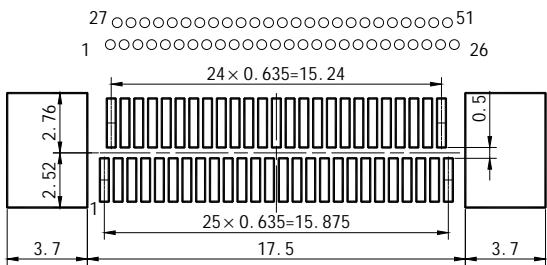
R06-221-M2-31RH-TH1



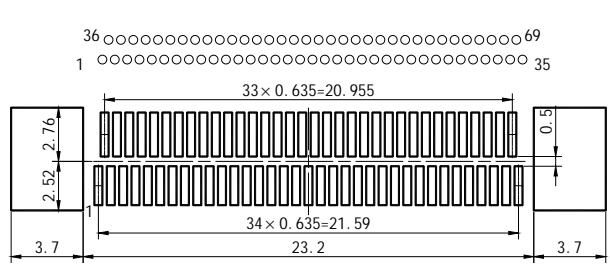
R06-221-M2-37RH-TH1



R06-221-M2-65RH-TH1



R06-221-M2-51RH-TH1



R06-221-M2-69RH-TH1

Remark: All dimensions are in mm

R06 Horizontal SMT Plug Series

Order marks

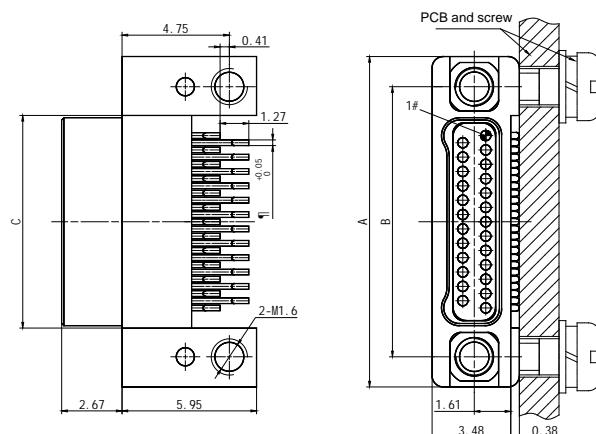
5 G T K G U	4		/	3	2 +	6 *	
% Q P V C E V T Q Y							
M V Q Y T Q Y U							
5 J G N N R N C V K P I							
M P K E M G N R N C V K P I							
% Q P V C E V R N C V K P I							
M I Q N F R N C V K P I							
6 C K N V G T O K P C V K Q P V [RG							
/M 5/6							
/ Q W P V K P I U V [NG							
M J Q T K \ Q P V C N 5/6							
% Q P V C E V P W O D G T							
Ä Ä Ä Ä Ä Ä Ä							
% Q P V C E V V [RG							
2 + M R K P K P R N W I							
. Q E M K P I E Q O R Q P G P V V [RG							
6 * M E Q P P G E V P W V							

R06-221-M3-25PI-TH

Remark

- R06-221-M3-**PI-TH usually mated with receptacle which have locking screw

Outline dimension



2 K P	E Q W P V	& K O G P U K Q P			2 K P	E Q W P V	& K O G P U K Q P			2 K P	E Q W P V	& K G P U K Q P		
		#	\$	%			#	\$	%			#	\$	%
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				

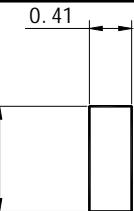
Remark: All dimensions are in mm



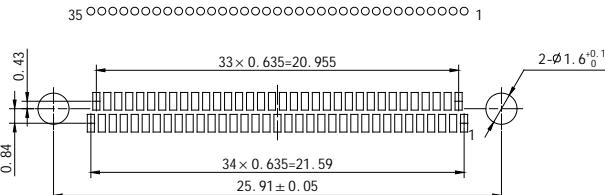
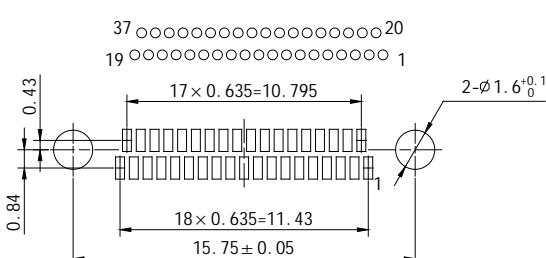
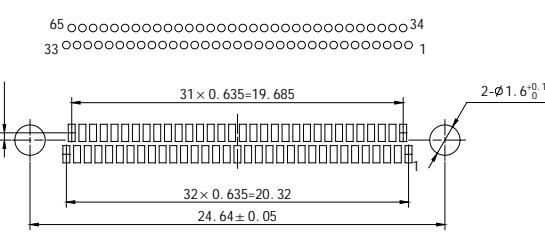
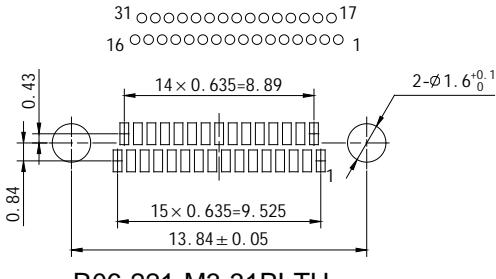
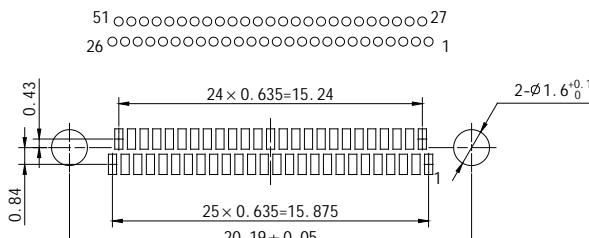
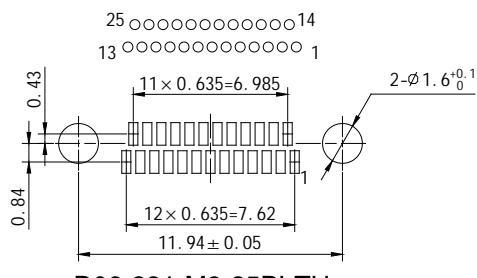
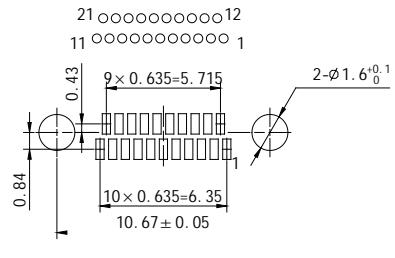
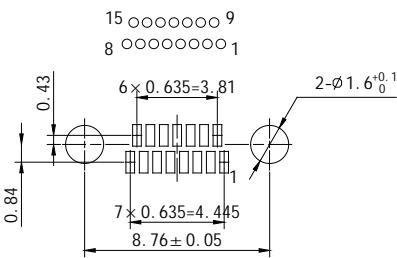
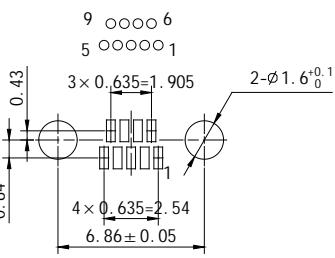
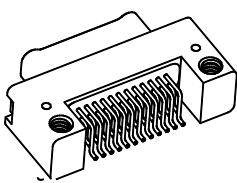
SUNKYE
www.sunkye.com

MIL-DTL-32139 Nano D-sub connectors

Suggested PCB Layout



Lead footprint dimension



Remark: All dimensions are in mm

R06 Horizontal SMT Receptacle Series

Order marks

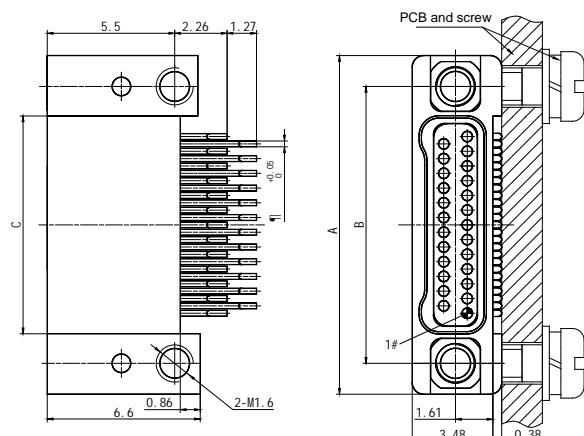
5 G T K G U	4		/	3	RH	6 *	
% Q P V C E V T Q Y							
M V Q Y T Q Y U							
5 J G N N R N C V K P I							
M P K E M G N R N C V K P I							
% Q P V C E V R N C V K P I							
M I Q N F R N C V K P I							
6 C K N V G T O K P C V K Q P V [RG]							
/ M 5 / 6							
/ Q W P V K P I U V [NG							
M J Q T K \ Q P V C N 5 / 6							
% Q P V C E V P W O D G T							
Ā Ā Ā Ā Ā Ā Ā Ā							
% Q P V C E V V [RG							
4 * M U Q E M G V K P T G E G R V C E N G							
. Q E M K P I E Q O R Q P G P V V [RG							
6 * M E Q P P G E V P W V							

R06-221-M3-25RH-TH

Remark

- R06-221-M3-*RH-TH usually mated with plug which have locking screw

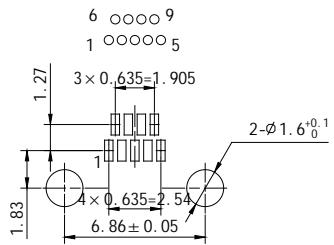
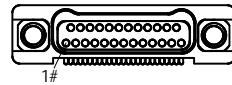
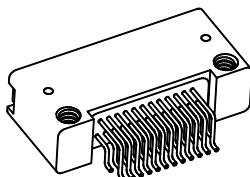
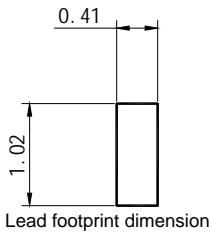
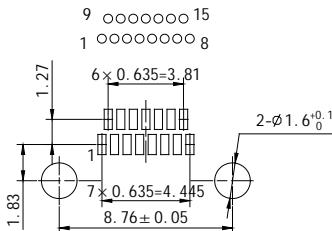
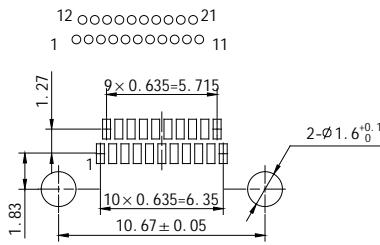
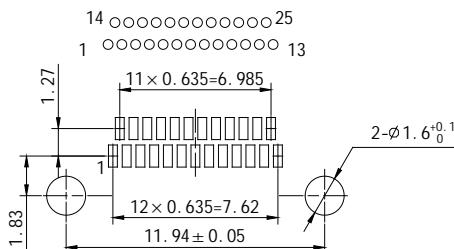
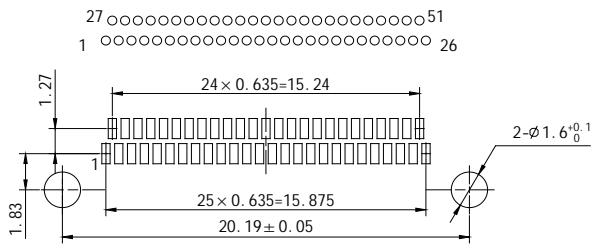
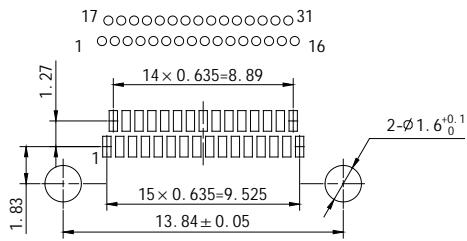
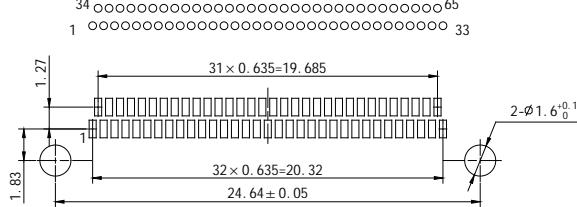
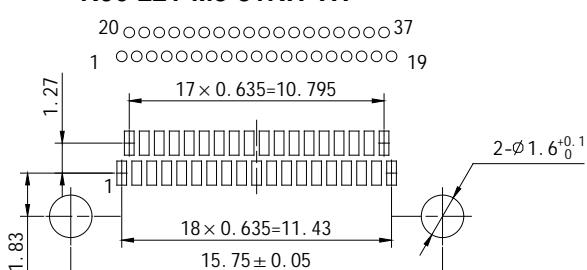
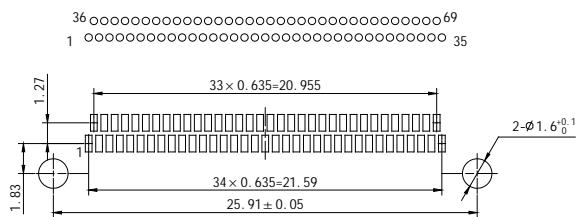
Outline dimension



2 K P	E Q W P V	& K O G P U K Q P			2 K P	E Q W P V	& K O G P U K Q P			2 K P	E Q W P V	& K G P U K Q P		
		#	\$	%			#	\$	%			#	\$	%
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				

Remark: All dimensions are in mm

Suggested PCB Layout


R06-221-M3-9RH-TH

R06-221-M3-15RH-TH

R06-221-M3-21RH-TH

R06-221-M3-25RH-TH

R06-221-M3-51RH-TH

R06-221-M3-31RH-TH

R06-221-M3-65RH-TH

R06-221-M3-37RH-TH

R06-221-M3-69RH-TH

Remark: All dimensions are in mm

R06 Straddle Flexible SMT Plug Series

Order marks

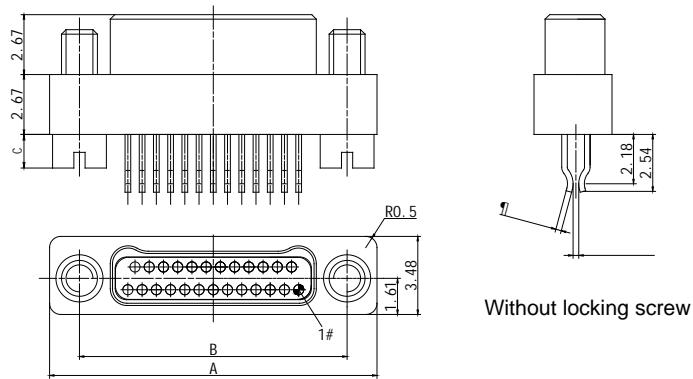
5 G T K G U	4		/	8	PI	-JC	
% Q P V C E V T Q Y							
M V Q Y T Q Y U							
5 J G N N R N C V K P I							
M P K E M G N R N C V K P I							
% Q P V C E V R N C V K P I							
M I Q N F R N C V K P I							
6 C K N V G T O K P C V K Q P V [RG							
/ M 5 / 6							
/ Q W P V K P I U V [NG							
M U V T C F F N G H N G Z K D N G 5 / 6							
% Q P V C E V P W O D G T							
Ā Ā Ā Ā Ā Ā Ā Ā							
% Q P V C E V V [RG							
2 + M R K P K P R N W I							
. Q E M K P I E Q O R Q P G P V V [RG							
JC—locking screw(straight slot, C dimension=1.5mm)							
JC1—locking screw(hex, not recommend , C dimension=2.1mm)							

R06-221-M8-25PI-JC

Remark

- μ Connector is free mounted,not fixed,usually mated with receptacle which have nut
- μ Recommended JC(straight slot screw) types of screws,tight by miniature straight screwdriver
- μ When choose JC1(hex) type of screws,tight by 1.27mm subtense hex screwdriver.
- μ PC tail solder on flexible PCB,PCB thickness is 0.25MAX.

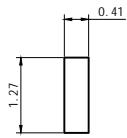
Outline dimension



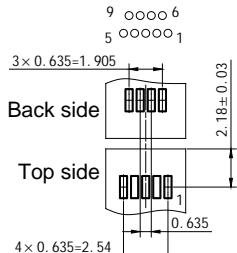
2 K P	E Q W P V	& K O G P U K Q P		2 K P	E Q W P V	& K O G P U K Q P		2 K P	E Q W P V	& K G P U K Q P	
		#	\$			#	\$			#	\$
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			

Remark: All dimensions are in mm

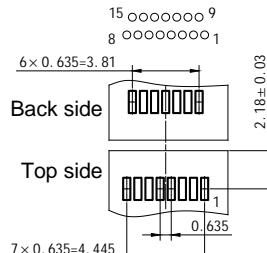
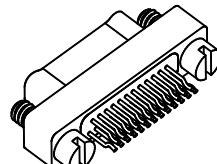
Suggested PCB Layout



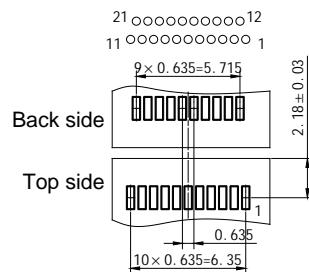
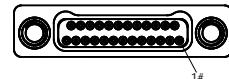
Lead footprint dimension



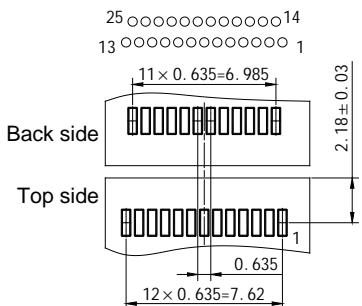
R06-221-M8-9PI-JC



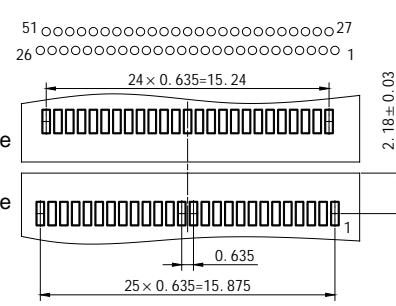
R06-221-M8-15PI-JC



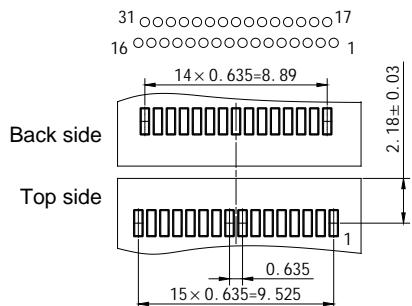
R06-221-M8-21PI-JC



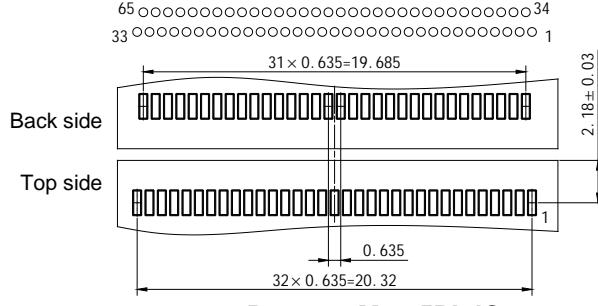
R06-221-M8-25PI-JC



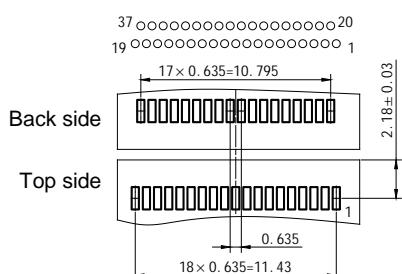
R06-221-M8-51PI-JC



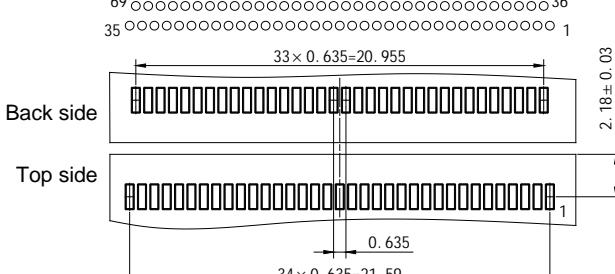
R06-221-M8-31PI-JC



R06-221-M8-65PI-JC



R06-221-M8-37PI-JC

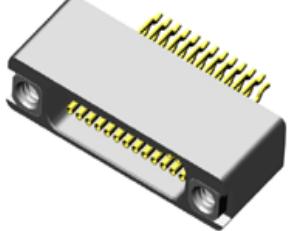


R06-221-M8-69PI-JC

Remark: All dimensions are in mm

R06 Straddle Flexible SMT Receptacle Series

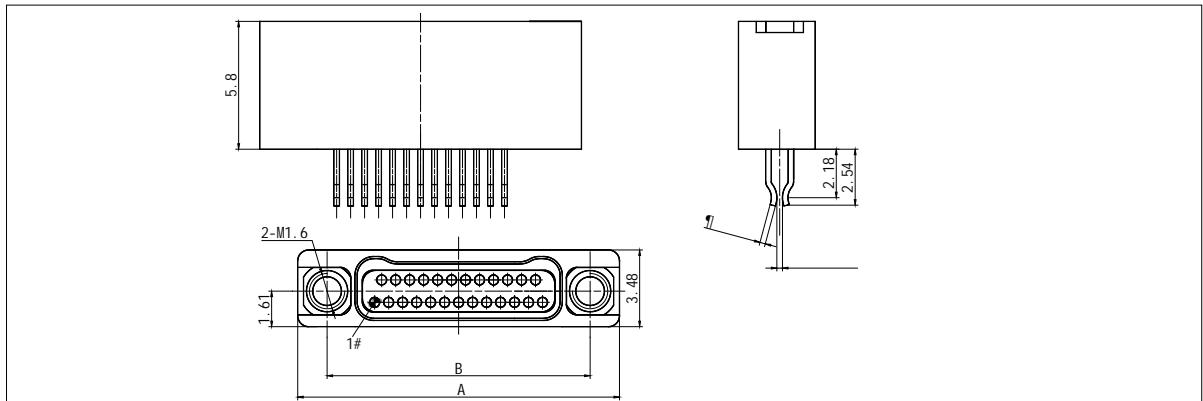
Order marks

5 G T K G U	4		/	8	RH	6 *	
% Q P V C E V T Q Y M V Q Y T Q Y U							
5 J G N N R N C V K P I M P K E M G N R N C V K P I							
% Q P V C E V R N C V K P I M I Q N F R N C V K P I							
6 C K N V G T O K P C V K Q P V [RG] / M 5 / 6							
/ Q W P V K P I U V [NG M U V T C F F N G H N G Z K D N G 5 / 6							
% Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä							
% Q P V C E V V [RG 4 * M U Q E M G V K P T G E G R V C E N G							
. Q E M K P I E Q O R Q P G P V V [RG 6 * M E Q P P G E V P W V							

Remark

- μ Connector is free mounted,not fixed,usually mated with plug which have screw
- μ PC tail solder on flexible PCB,PCB thickness is 0.25MAX.

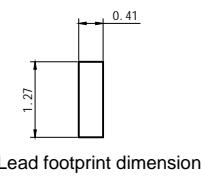
Outline dimension



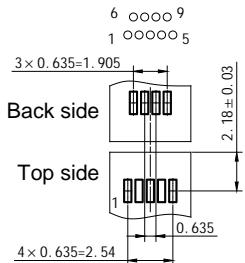
2 K P	E Q W P V	& K O G P U K Q P		2 K P	E Q W P V	& K O G P U K Q P		2 K P	E Q W P V	& K G P U K Q P	
		#	\$			#	\$			#	\$
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			

Remark: All dimensions are in mm

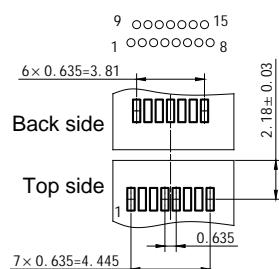
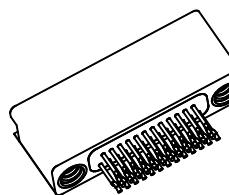
Suggested PCB Layout



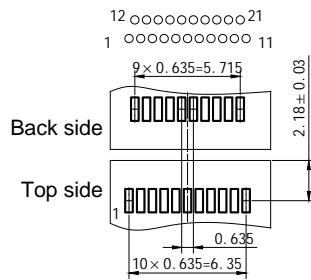
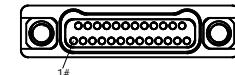
Lead footprint dimension



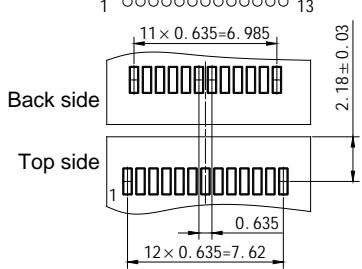
R06-221-M8-9RH-TH



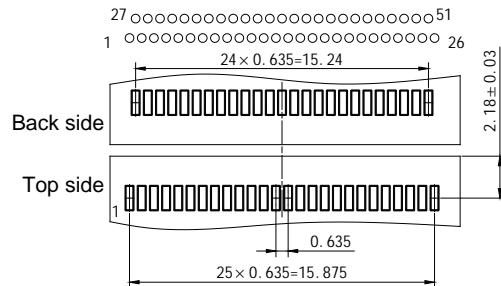
R06-221-M8-15RH-TH



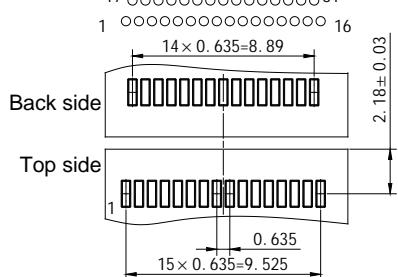
R06-221-M8-21RH-TH



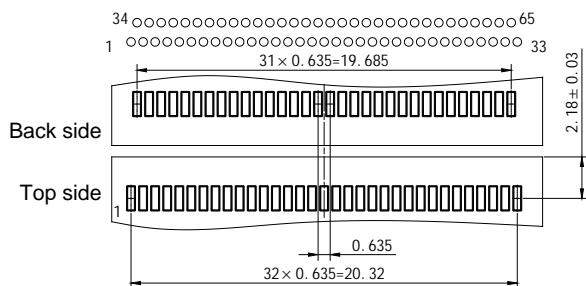
R06-221-M8-25RH-TH



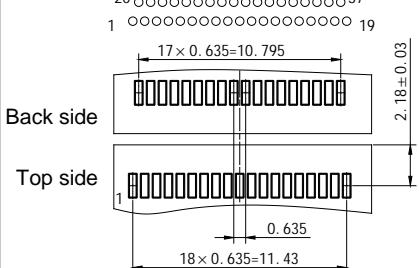
R06-221-M8-51RH-TH



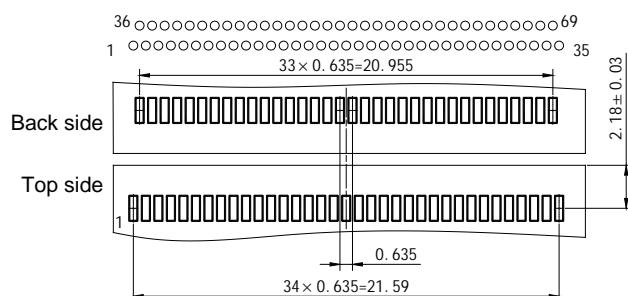
R06-221-M8-31RH-TH



R06-221-M8-65RH-TH



R06-221-M8-37RH-TH



R06-221-M8-69RH-TH

Remark: All dimensions are in mm

MIL-DTL-32139 Nano D-sub Connectors

R06 Crimp Contact Series

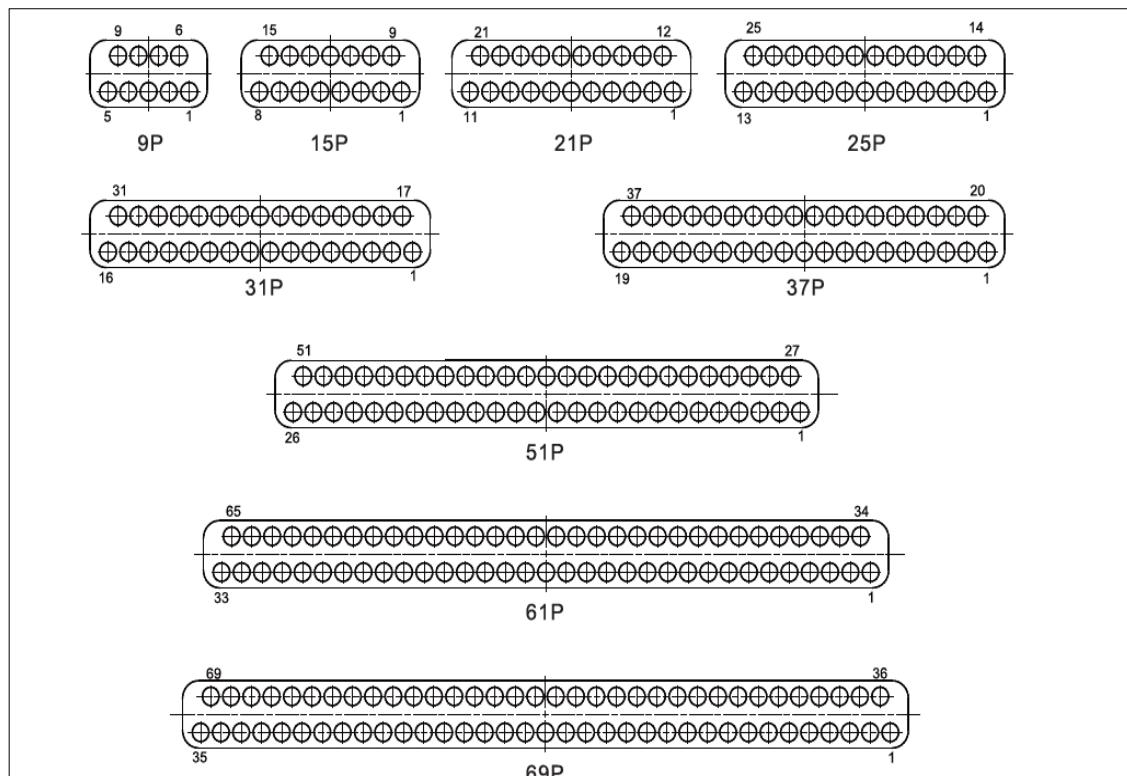
Brief introduction

- ✓ 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
- ✓ The sectional area of crimp conductive cable is 0.035mm²
- ✓ Undefined tolerance is ±0.13

Specification

✓ Environment:	X	✓ Contact resistance:	A	»
✓ Vibration:	% V X	% V	I O	✓ Insulation resistance: — » * 3 !
✓ Shock:	I O	I O		✓ 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

5 G T K G U	4		%	2 +	6 *
% Q P V C E V T Q Y					
M V Q Y T Q Y U					
5 J G N N R N C V K P I					
M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I					
M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [RG					
% M E T K O R					
/ Q W P V K P I U V [NG					
M H T G G O Q W P V G F					
M X G T V K E C N O Q W P V G F					
M J Q T K \ Q P V C N O Q W P V G F					
M E T K O R U K C O G U G					
M P W V O Q W P V G F					
M (N C P I G O Q W P V G F					
M (N Q C V K P I O Q W P V G F					
% Q P V C E V P W O D G T					
Ã Ä Ä Ä Ä Ä Ä Ä					
% Q P V C E V V [RG					
2 + M R K P K P R N W I					
4 * M U Q E M G V K P T G E G R V C E N G					
22 M R N W I K P V G T E Q P P G E V R N W I					
25 M R N W I K P V G T E Q P P G E V T G E G R V C E N G					
55 M T G E G R V C E N G K P V G T E Q P P G E V T G E G R V C E N G					
7 D L O F R Y H U					
M Y K V J Q W V V C K N E Q X G T					
M Y K V J V C K N E Q X G T					
. Q E M K P I E Q O R Q P G P V V [RG					
M Y K V J Q W V N Q E M K P I E Q O R Q P G P V					
, % M N Q E M K P I U E T G Y U V T C K I J V U N Q V					
, % M N Q E M K P I U E T G Y J G Z P Q V T G E Q O O G P F					
6 * M E Q P P G E V P W V					
0 * M I W K F G J Q N G Y K V J P W V O Q W P V G F					

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.

Free Mounted Crimp Series

Order marks

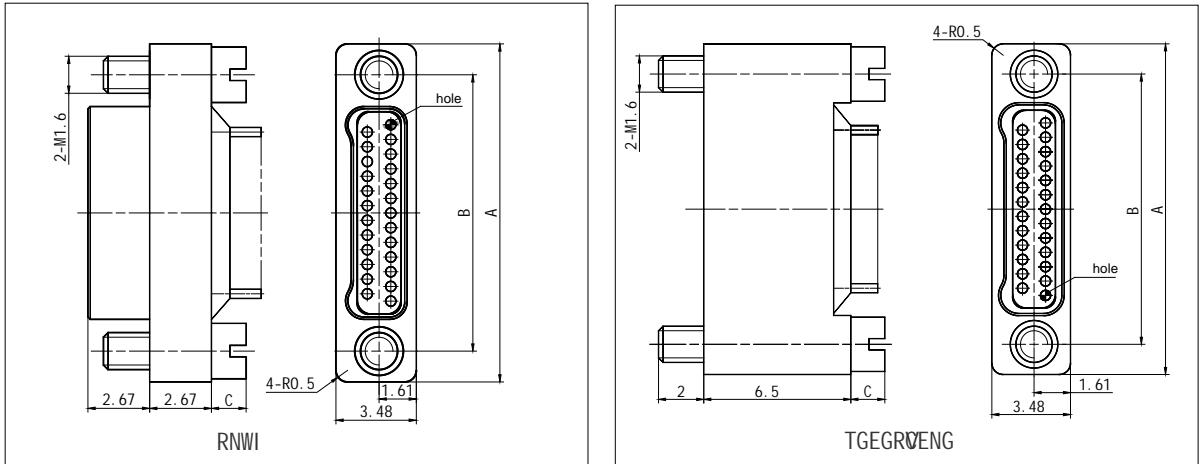
5 G T K G U	4	%	2 +	, %	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 G T O K P C V K Q P V [RG] METKO					R N W I
/ Q W P V K P I U V [NG] M H T G G O Q W P V G F					
% Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä					
% Q P V C E V V [RG] 2 + M R K P K P R N W M U Q E M G V K P T G E G R V C E N G					
7 D L O F R Y H U M Y K V J Q W V V C K N E Q X G T					T G E G R V C E N G
. Q E M K P I V [RG]					

JC— locking screw(straight slot, C dimension=1.5mm)
JC1— locking screw(hex, not recommend , C dimension=2.1mm)

Remark

- Locking screw fixed on the outer shell, can't disassembly
- Connector is free mounted,not fixed,usually mated with connector which have nut
- Recommended JC(straight slot screw) types of screws,tight by miniature straight screwdriver
- When choose JC1(hex) type of screws,tight by 1.27mm subtense hex screwdriver.

Outline dimension



2KEP	KGPKD		2KEP	KGPKD		2KEP	KGPKD	
	#	\$		#	\$		#	\$
RKP			RKP			RKP		
RKP			RKP			RKP		
RKP			RKP			RKP		

Remark: All dimensions are in mm

Vertical Mounted Crimp Series

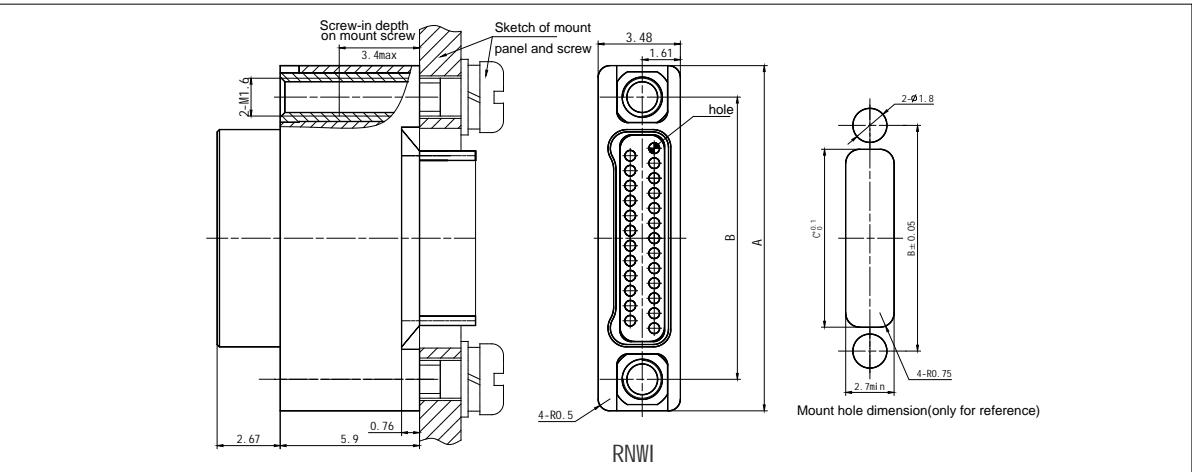
Order marks

5 G T K G U	4	%	2	RH	-TH	
% Q P V C E V T Q Y						
M V Q Y T Q Y U						
5 J G N N R N C V K P I						
M P K E M G N R N C V K P I						
% Q P V C E V R N C V K P I						
M I Q N F R N C V K P I						
6 G T O K P C V K Q P V [RG]						
% M E T K O R						
/ Q W P V K P I U V [NG]						
M X G T V K E C N O Q W P V G F						
% Q P V C E V P W O D G T						
Ã Ä Ã Ä Ã Ä Ã Ä Ã Ä						
% Q P V C E V V [RG]						
2 + M R K P K P R N W M U Q E M G V K P T G E G R V C E N G						
7 D L O F R Y H U						
M Y K V J Q W V V C K N E Q X G T						
. Q E M K P I V [RG]						
6 * M E Q P P G E V P W V						
						T G E G R V C E N G

Remark

- ¶ Connectiong nut with thread structure forepart used for locking screw,back part used for mounting
- ¶ The connector with connect nut that usually mated with connector which have locking screw

Outline dimension

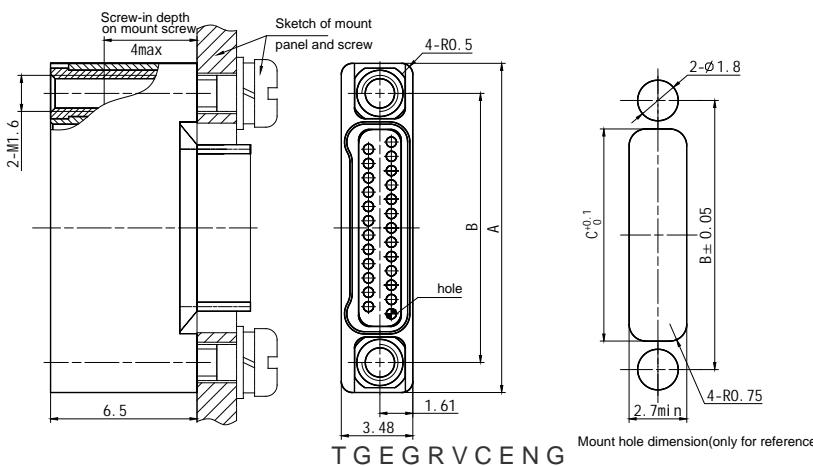


2KE07	KGPK0			2KE07	KGPK0			2KE07	KGPK0		
	#	\$	%		#	\$	%		#	\$	%
RKB				RKB				RKB			
RKB				RKB				RKB			
RKB				RKB				RKB			

Remark: All dimensions are in mm

Vertical Mounted Crimp Series

Outline dimension



2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K G P U K Q P		
	#	\$	%		#	\$	%		#	\$	%
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			

Remark: All dimensions are in mm

Horizontal Mounted Crimp Series

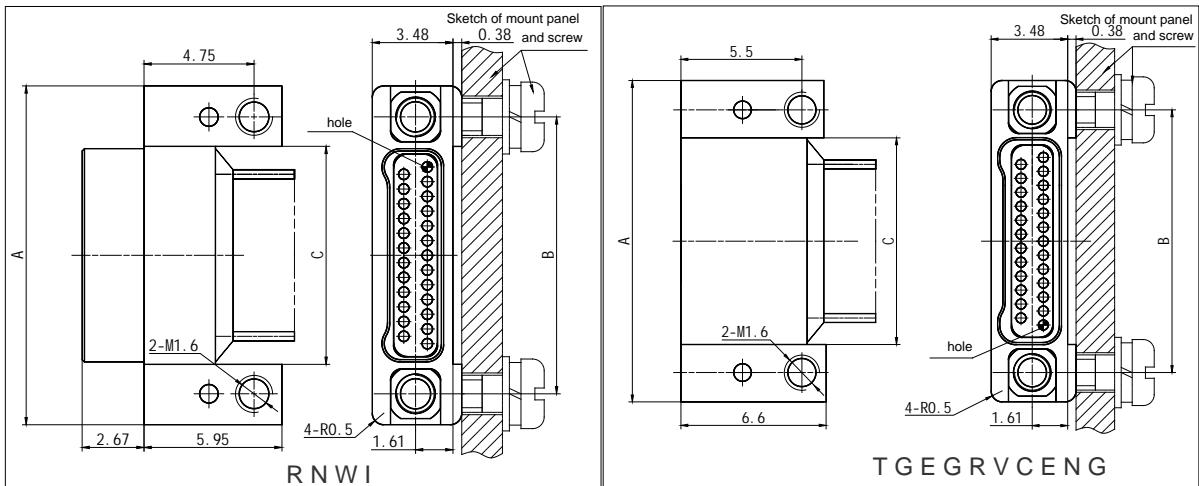
Order marks

5 G T K G U	4	%	3	RH	-TH	
% Q P V C E V T Q Y M V Q Y T Q Y U						
5 J G N N R N C V K P I M P K E M G N R N C V K P I						
% Q P V C E V R N C V K P I M I Q N F R N C V K P I						
6 G T O K P C V K Q P V [RG] % M E T K O R						R N W I
/ Q W P V K P I U V [NG] M J Q T K \ Q P V C N O Q W P V G F						
% Q P V C E V P W O D G T Ā Ā Ā Ā Ā Ā Ā Ā						
% Q P V C E V V [RG] 2 + M R K P K P R N 4 W M U Q E M G V K P T G E G R V C E N G						
7 D L O F R Y H U M Y K V J Q W V V C K N E Q X G T						
. Q E M K P I V [RG] 6 * M E Q P P G E V P W V						T G E G R V C E N G

Remark

- μ Connector is horizontal mounted
- μ The connector with connect nut that usually mated with connector which have locking screw

Outline dimension



2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K G P U K Q P		
	#	\$	%		#	\$	%		#	\$	%
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			

Remark: All dimensions are in mm

Crimp Siamese Connection Series

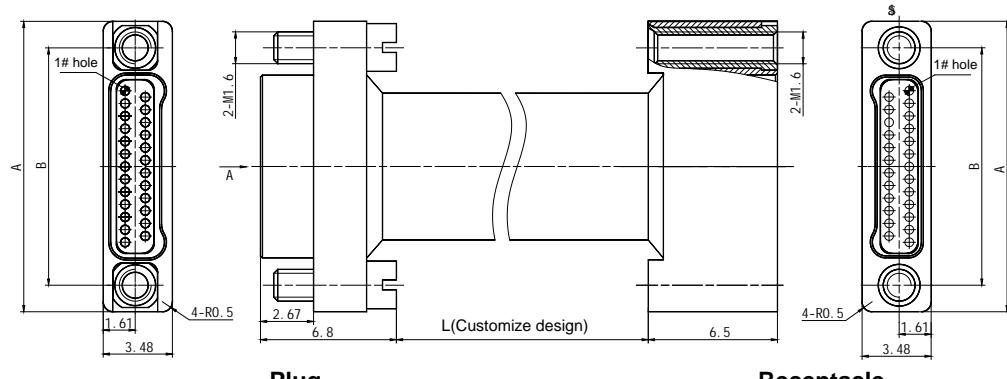
Order marks

5 G T K G U	4	%	4	PP	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 G T O K P C V K Q P V [RG] % M E T K O R					PP
/ Q W P V K P I U V [NG] 4 M E T K O R U K C O G U G					
% Q P V C E V P W O D G T Ã Ä Ä Ä Ä Ä Ä Ä					
% Q P V C E V V [RG] 22M R N W I K P V G T E Q P P G E V R N W I					
25M R N W I K P V G T E Q P P G E V T G E G R V C E N G					
55M T G E G R V C E N G K P V G T E Q P P G E V T G E G R V C E N G					
					PS

Remark

- The matching locking component for this series is single form. (1) Plug with locking screw
(2) Reacetacle with locking nut

Outline dimension



Plug

Receptacle

2 K P E Q W P V & K O G P U K Q P		2 K P E Q W P V & K O G P U K Q P		2 K P E Q W P V & K O G P U K Q P	
#	\$	#	\$	#	\$
R K P U		R K P U		R K P U	
R K P U		R K P U		R K P U	
R K P U		R K P U		R K P U	

Remark: All dimensions are in mm

Nut Mounted Crimp Receptacle with Guid Hole Series

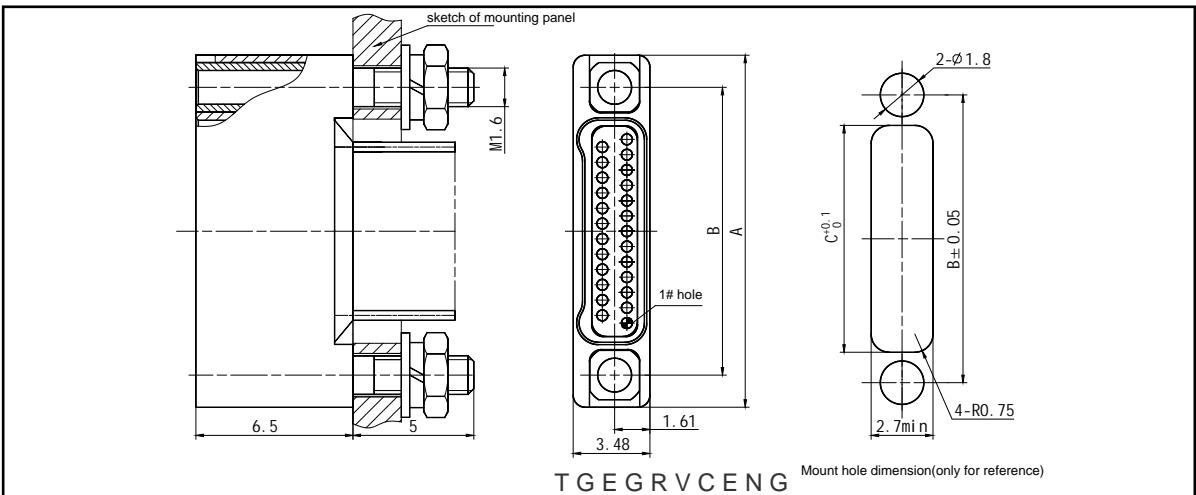
Order marks

5 G T K G U	4	%	RH	-TH	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 G T O K P C V K Q P V [RG % M E T K O R					
/ Q W P V K P I U V [NG 5 — nut mounted					
% Q P V C E V P W O D G T A A A A A A A					RH
% Q P V C E V V [RG 4 * M U Q E M G V K P T G E G R V C E N G					
7 D L O F R Y H U M Y K V J Q W V V C K N E Q X G T					
. Q E M K P I V [RG					
NH— guide hole with nut mounted					

Remark

- Connector with guid hole, usually mated with plug which have guid pin

Outline dimension



2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K O G P U K Q P			2 K P E Q W P V	& K G P U K Q P		
	#	\$	%		#	\$	%		#	\$	%
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			
R K P U				R K P U				R K P U			

Remark: All dimensions are in mm

Flange Mounted Crimp Receptacle with Guid Hole Series

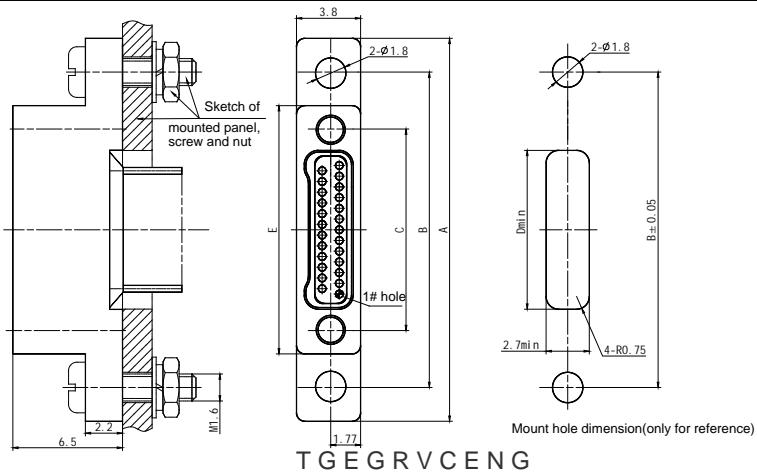
Order marks

5 G T K G U	4	%	6	RH	-00	
% Q P V C E V T Q Y M V Q Y T Q Y U						
5 J G N N R N C V K P I M P K E M G N R N C V K P I						
% Q P V C E V R N C V K P I M I Q N F R N C V K P I						
6 G T O K P C V K Q P V [RG] % M E T K O R						
/ Q W P V K P I U V [NG]						
6 — flanged mounted						
% Q P V C E V P W O D G T A A A A A A A						RH
% Q P V C E V V [RG] 4 * M U Q E M G V K P T G E G R V C E N G						
7 D L O F R Y H U M Y K V J Q W V V C K N E Q X G T						
. Q E M K P I V [RG]						
00 — without locking component						

Remark

- Connector with guid hole, usually mated with plug which have guid pin

Outline dimension



& K O G P U K Q P					& K O G P U K Q P				
#	\$	%	&	'	#	\$	%	&	'
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U									

Remark: All dimensions are in mm

Floating Mounted Crimp Plug Series

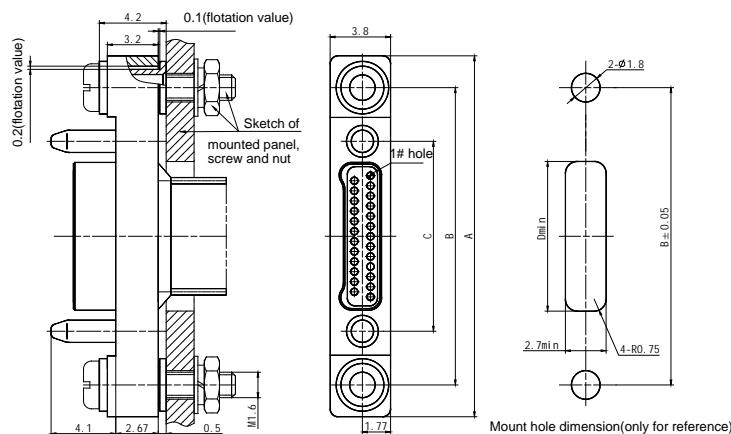
Order marks

5 G T K G U	4	%	7	PI	-00	
% Q P V C E V T Q Y M V Q Y T Q Y U						
5 J G N N R N C V K P I M P K E M G N R N C V K P I						
% Q P V C E V R N C V K P I M I Q N F R N C V K P I						
6 G T O K P C V K Q P V [RG] % M E T K O R						
/ Q W P V K P I U V [NG] 7 — floating mounted						
% Q P V C E V P W O D G T A A A A A A A						PI
% Q P V C E V V [RG] 4 * M U Q E M G V K P T G E G R V C E N G						
7 D L O F R Y H U M Y K V J Q W V V C K N E Q X G T						
. Q E M K P I V [RG]						
00 — without locking component						

Remark

- Connector with guid pin and floating tube, application on blind-mated connector
- Connector usually mated with receptacle which have guid hole

Outline dimension



2 N W I

2 K P E Q W P V	& K O G P U K Q P				2 K P E Q W P V	& K O G P U K Q P			
	#	\$	%	&		#	\$	%	&
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				

Remark: All dimensions are in mm

Free Mounted Crimp Connector with Tail Cover Series

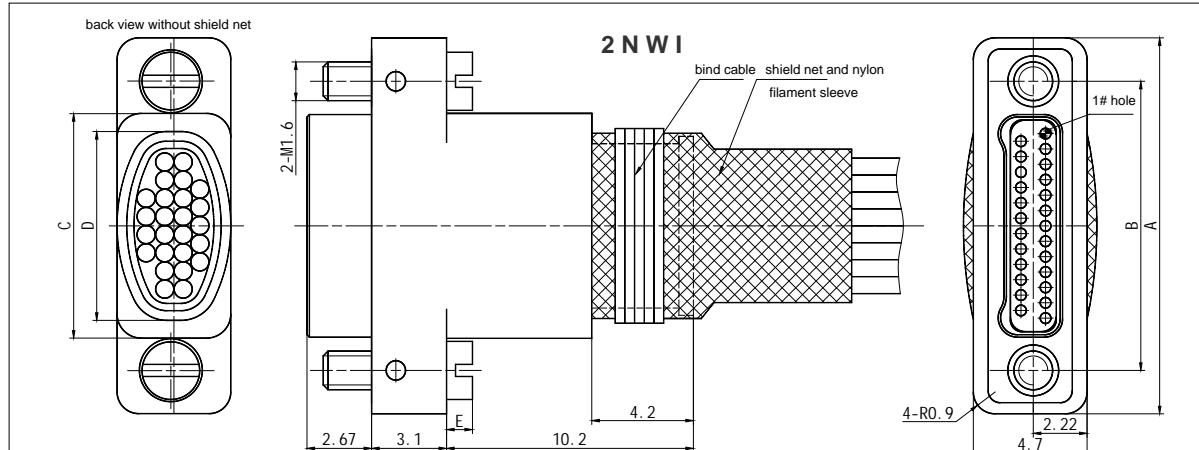
Order marks

5 G T K G U	4	%	PI	-JC	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 G T O K P C V K Q P V [RG] % M E T K O R					2 +
/ Q W P V K P I U V [NG] M H T G G Q Q W P V G F					
% Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä					
% Q P V C E V V [RG] 2 + M R K P K P R N W M U Q E M G V K P T G E G R V C E N G					
7 D L O F R Y H U M Y K V J V C K N E Q X G T					
. Q E M K P I V [RG]					RH
JC—locking screw(straight slot, E dimension=1mm)					
JC1—locking screw(hex, not recommend , E dimension=1.6mm)					

Remark

- Connector with integrated tail cover,bind shielding net on tail cover,shield whole connector,tail cover non-removable
- Connector is free mounted,not fixed,usually mated with connector which have nut
- Recommended JC(straight slot screw) types of screws,tight by miniature straight screwdriver
- When choose JC1(hex) type of screws,tight by 1.27mm subtense hex screwdriver.

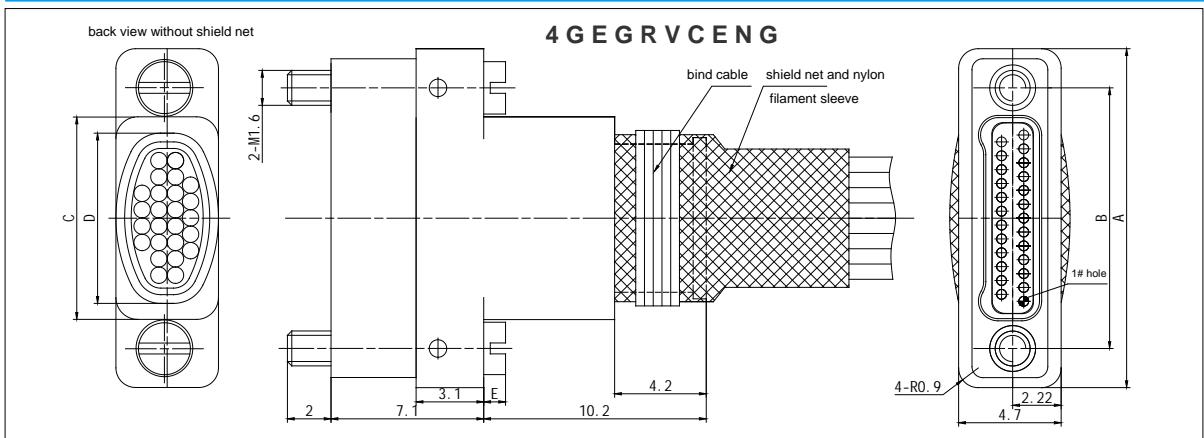
Outline dimension



2KE07	KGDK2				2KE07	KGDK2			
	#	\$	%	&		#	\$	%	&
RK07					RK07				
RK07					RK07				
RK07					RK07				
RK07					RK07				
RK07									

Remark: All dimensions are in mm

Outline dimension



& K O G P U K Q P				& K O G P U K Q P			
2 K P E Q W P V #	\$	%	&	2 K P E Q W P V #	\$	%	&
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U							

Remark: All dimensions are in mm

Vertical Mounted Crimp Connector with Tail Cover Series

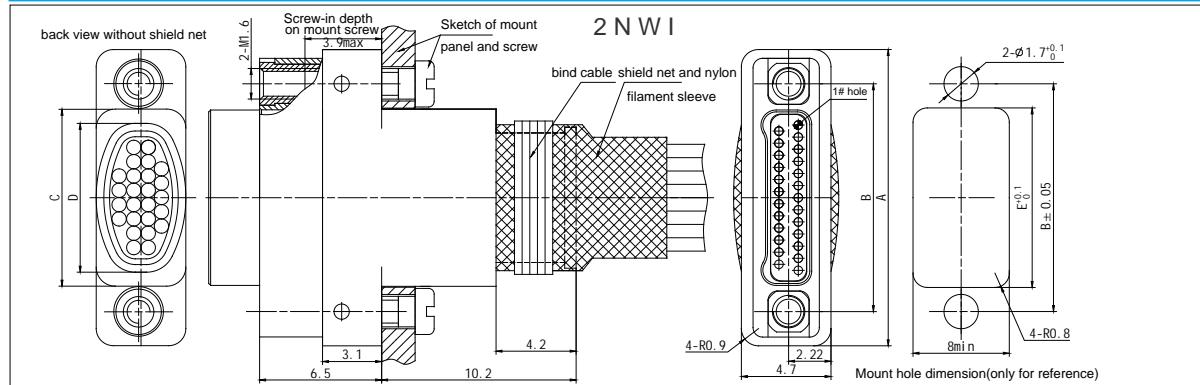
Order marks

5 G T K G U	4	%	RH	-TH	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 G T O K P C V K Q P V [RG] % M E T K O R					2 +
/ Q W P V K P I U V [NG] M X G T V K E C N O Q W P V G F					
% Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä					
% Q P V C E V V [RG] 2 + M R K P K P R N W M U Q E M G V K P T G E G R V C E N G					
7 D L O F R Y H U M Y K V J V C K N E Q X G T					RH
. Q E M K P I V [RG] 6 * M E Q P P G E V P W V					

Remark

- Connector with integrated tail cover, bind shielding net on tail cover, shield whole connector, tail cover non-removable
- Connector usually mated with connector which have screw
- As these series connector limited by dimension, it can't use standard M1.6mm screw, so we provide special-made M1.6*6 mounted screw.

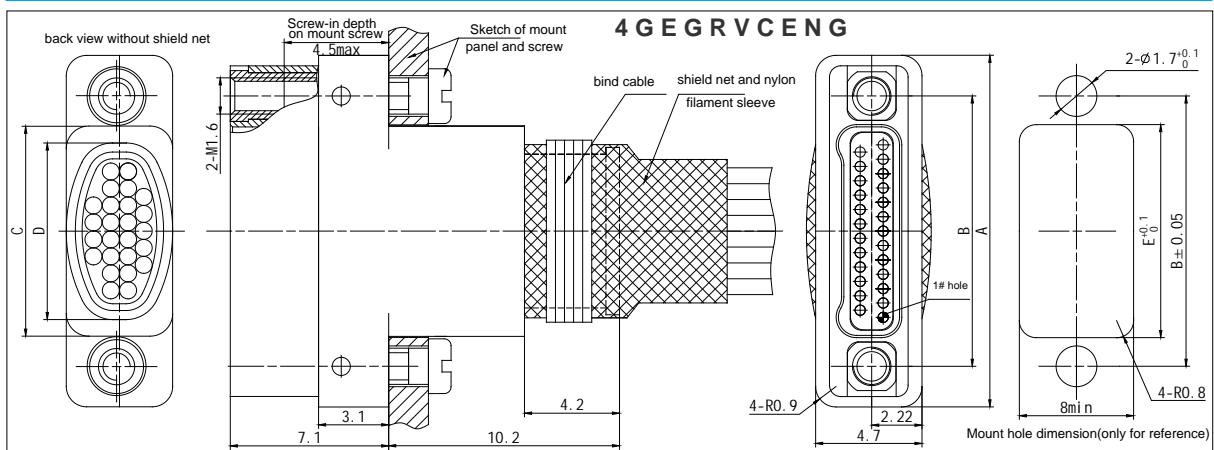
Outline dimension



& K O G P U K Q P					& K O G P U K Q P				
#	\$	%	&	'	#	\$	%	&	'
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U					R K P U				
R K P U									

Remark: All dimensions are in mm

Outline dimension



& K O G P U K Q P					& K O G P U K Q P								
2	K	P	E	Q	W	P	V	#	\$	%	&	'	
R	K	P	U					R	K	P	U		
R	K	P	U					R	K	P	U		
R	K	P	U					R	K	P	U		
R	K	P	U					R	K	P	U		
R	K	P	U										

Remark: All dimensions are in mm

Horizontal Mounted Crimp Connector with Tail Cover Series

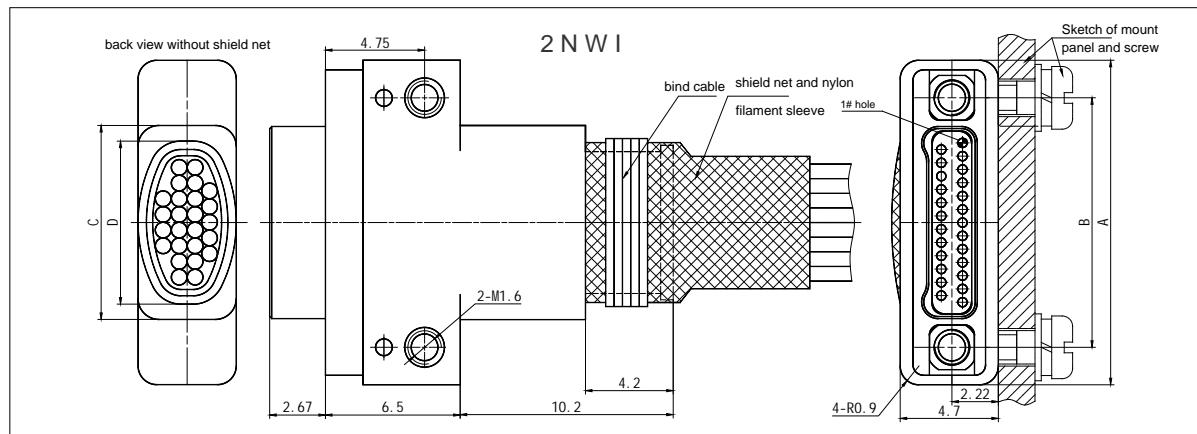
Order marks

5 G T K G U	4	%	3	RH	-TH	
% Q P V C E V T Q Y M V Q Y T Q Y U						
5 J G N N R N C V K P I M P K E M G N R N C V K P I						
% Q P V C E V R N C V K P I M I Q N F R N C V K P I						
6 G T O K P C V K Q P V [RG] % M E T K O R						2 +
/ Q W P V K P I U V [NG] M J Q T K I Q P V C N O Q W P V G F						
% Q P V C E V P W O D G T Ä Ä Ä Ä Ä Ä Ä						
% Q P V C E V V [RG] 2 + M R K P K P R N W M U Q E M G V K P T G E G R V C E N G						
7 D L O F R Y H U M Y K V J V C K N E Q X G T						RH
. Q E M K P I V [RG] 6 * M E Q P P G E V P W V						

Remark

- μ Connector with integrated tail cover, bind shielding net on tail cover, shield whole connector, tail cover non-removable
- μ Connector usually mated with connector which have screw

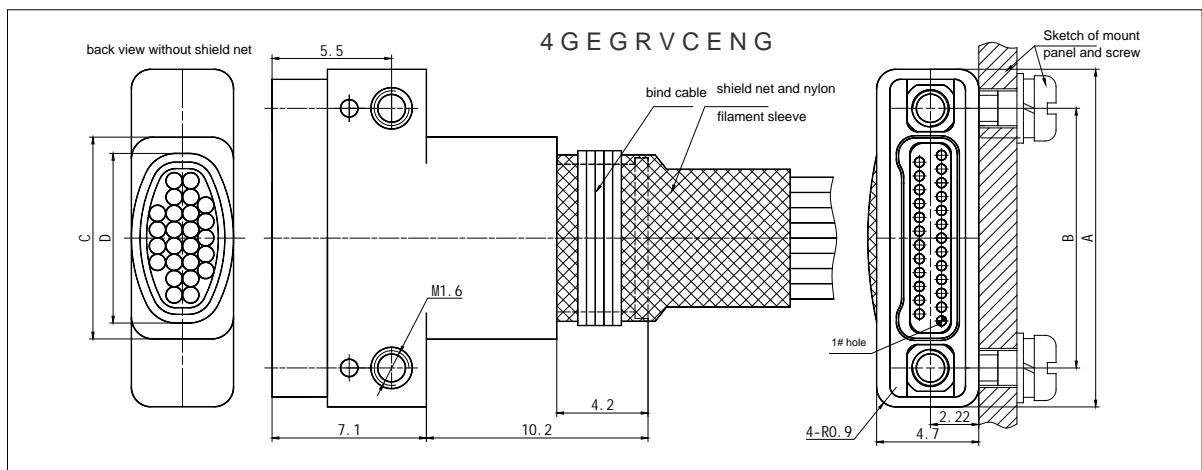
Outline dimension



& K O G P U K Q P				& K O G P U K Q P			
2 K P E Q W P V	#	\$	%	2 K P E Q W P V	#	\$	%
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U							

Remark: All dimensions are in mm

Outline dimension



& K O G P U K Q P				& K O G P U K Q P			
2 K P	E Q	W P V	#	2 K P	E Q	W P V	#
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U				R K P U			
R K P U							

Remark: All dimensions are in mm

MIL-DTL-32139 Nano D-sub Connectors

R06 Straight to PCB Series

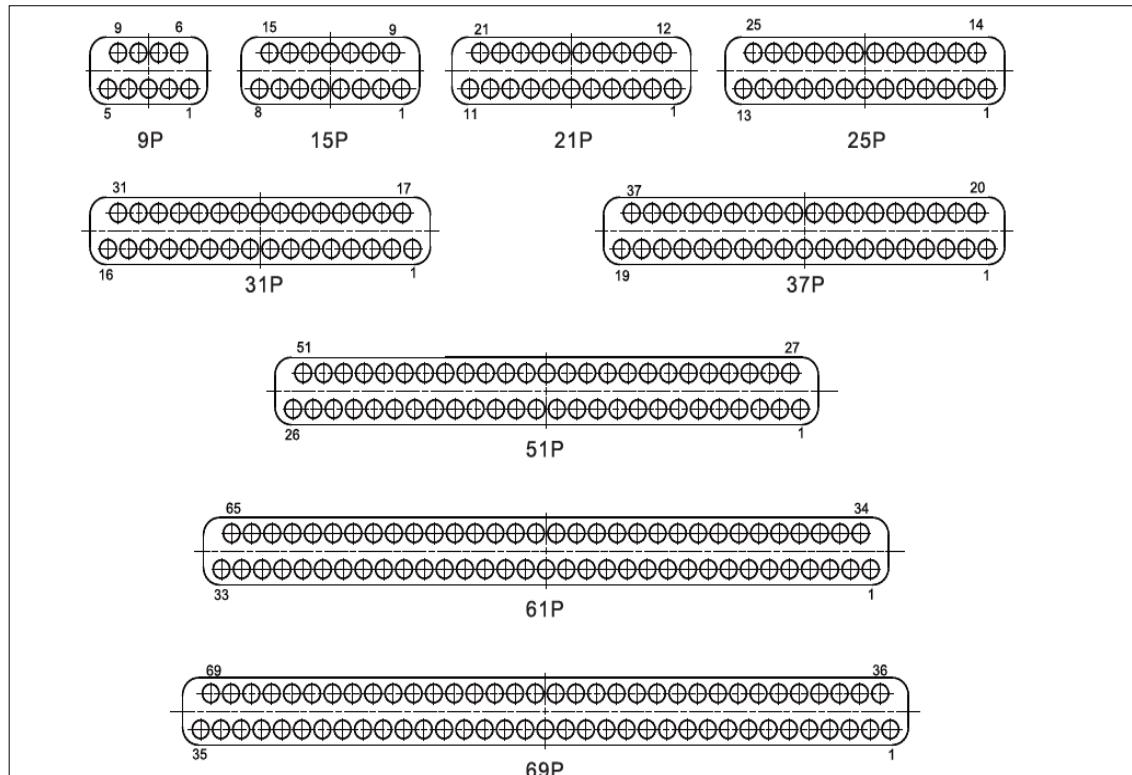
Brief introduction

- ✓ 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: | X | ✓ Contact resistance: | A | » |
| ✓ Vibration: | ■ | ✓ Insulation resistance: | * | » B |
| ✓ Shock: | I O D | ✓ Dielectric strength: | 250V | |
| ✓ Rated current: | 1A | ✓ Machine life: | 200 times | |
| ✓ Random vibration: power spectrum density 0.4G /Hz, r.m.s value of total acceleration 23.1G | | | | |

Contact layout



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

R06 Straight to PCB Plug Series

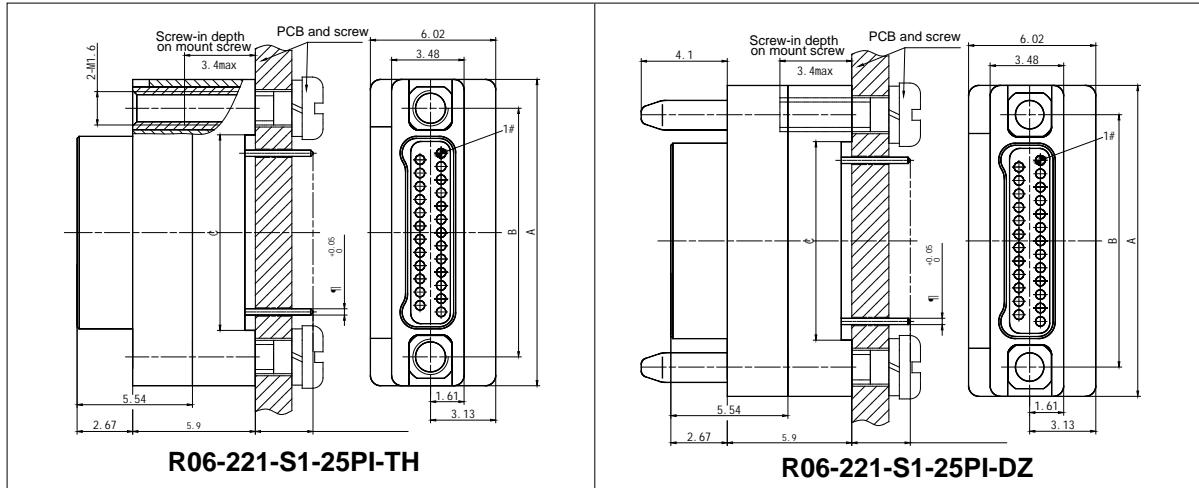
Order marks

5 G T K G U	4	5	2 +	6 *	
% Q P V C E V T Q Y					
M V Q Y T Q Y U					
5 J G N N R N C V K P I					
M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I					
M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [RG]					R06-221-S1-25PI-TH
5 M U V T C K I J V V Q R E D					
6 C K N N G P I V J					
M O O					
M O O					
M O O					
% Q P V C E V P W O D G T					
Ā Ā Ā Ā Ā Ā Ā Ā					
% Q P V C E V V [RG]					R06-221-S1-25PI-DZ
2 + M R K P K P R N W I					
. Q E M K P I V [RG]					
& < M I W K F G R K 6 P M E Q P P G E V P W V					

Remark

- μ 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
- μ 3 kinds of tail length, customized produce for other length

Outline dimension

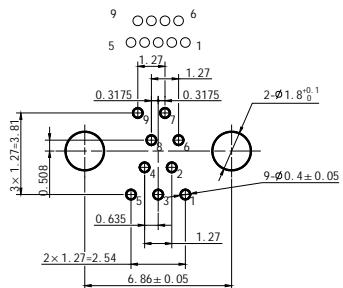
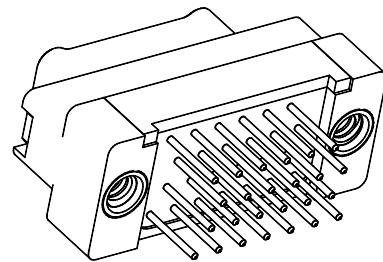
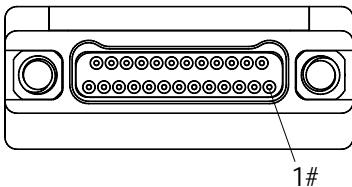


2 K P	E Q	& K O G P U K Q P			2 K P	E Q	& K O G P U K Q P			2 K P	E Q	& K G P U K Q P		
		#	\$	%			#	\$	%			#	\$	%
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				
R K P U					R K P U					R K P U				

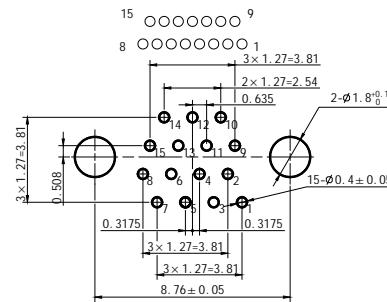
Remark: All dimensions are in mm



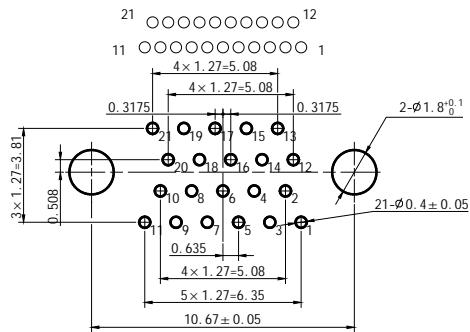
Suggested PCB Layout



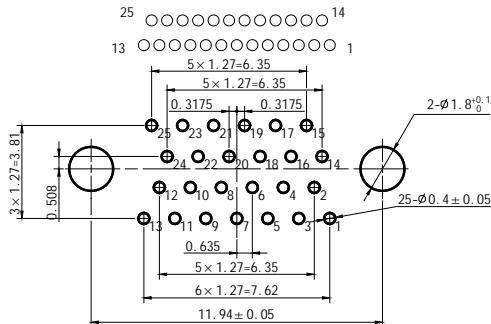
R06-221-S1/S2/S3-9PI-TH



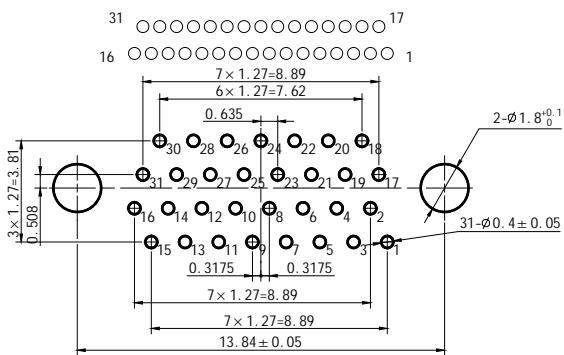
R06-221-S1/S2/S3-15PI-TH



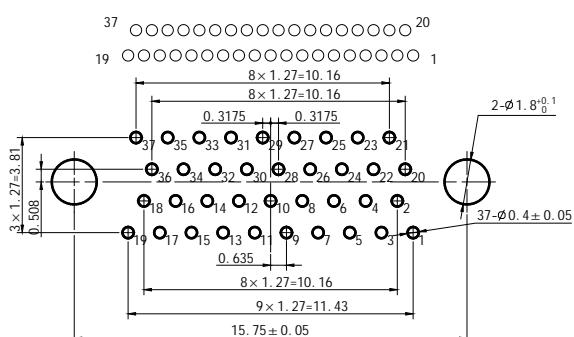
R06-221-S1/S2/S3-21PI-TH



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



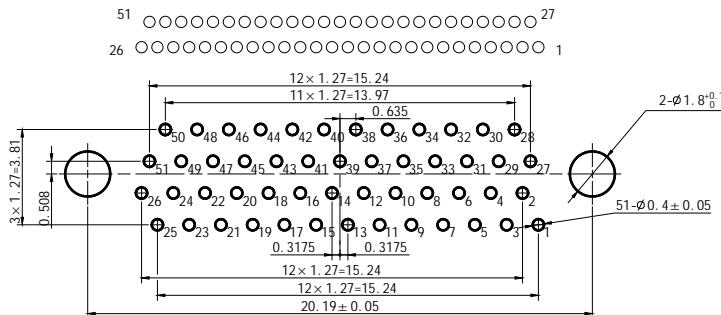
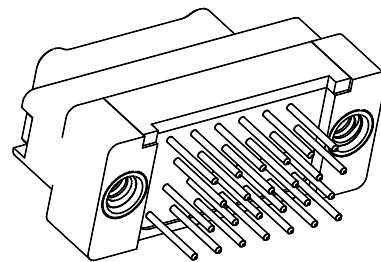
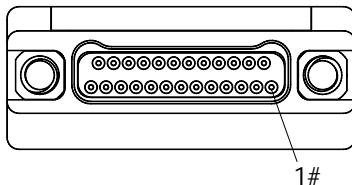
R06-221-S1/S2/S3-31PI-TH



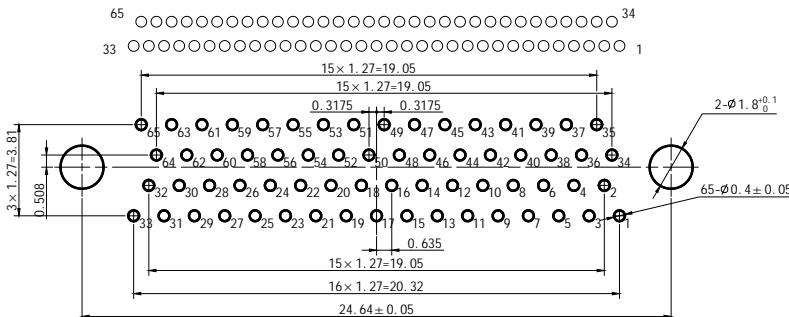
R06-221-S1/S2/S3-37PI-TH

Remark: All dimensions are in mm

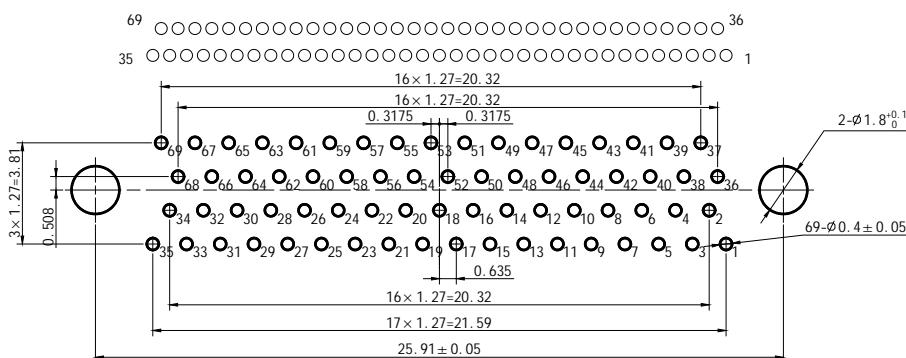
Suggested PCB Layout



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 Straight to PCB Receptacle Series

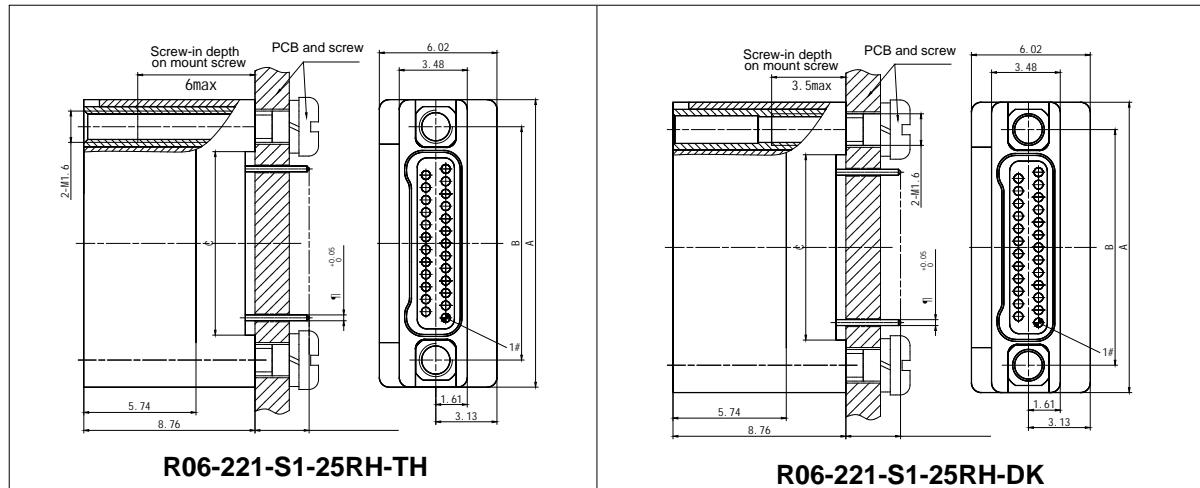
Order marks

5 G T K G U	4	5	RH	6 *	
% Q P V C E V T Q Y M V Q Y T Q Y U					
5 J G N N R N C V K P I M P K E M G N R N C V K P I					
% Q P V C E V R N C V K P I M I Q N F R N C V K P I					
6 C K N V G T O K P C V K Q P V [R G 5 M U V T C K I J V V Q R E D					R06-221-S1-25RH-TH
6 C K N N G P I V J M O O M O O M O O					
% Q P V C E V P W O D G T A A A A A A A A					
% Q P V C E V V [R G 4 * M U Q E M G V K P T G E G R V C E N G . Q E M K P I V [R G DK M I W K F G J Q N G M E Q P P G E V P W V					R06-221-S1-25RH-DK

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



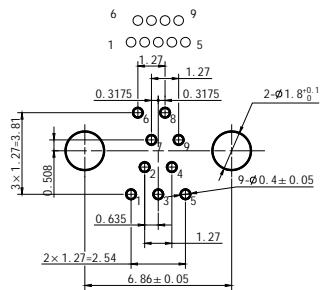
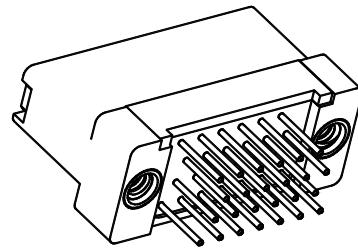
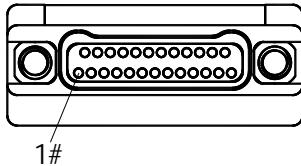
R06-221-S1-25RH-TH

R06-221-S1-25RH-DK

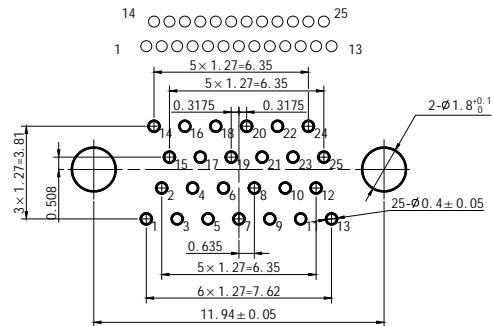
2 K P	& K O G P U K Q P			2 K P	& K O G P U K Q P			2 K P	& K G P U K Q P			
	E Q	W P V	#		\$	%	E Q		W P V	#	\$	%
R K P U				R K P U				R K P U				
R K P U				R K P U				R K P U				
R K P U				R K P U				R K P U				

Remark: All dimensions are in mm

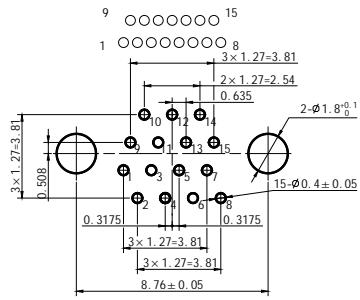
Suggested PCB Layout



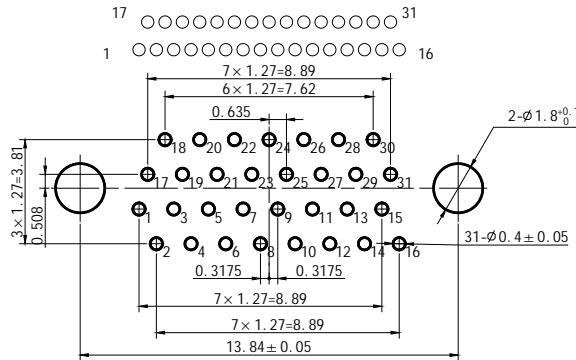
R06-221-S1/S2/S3-9RH-TH



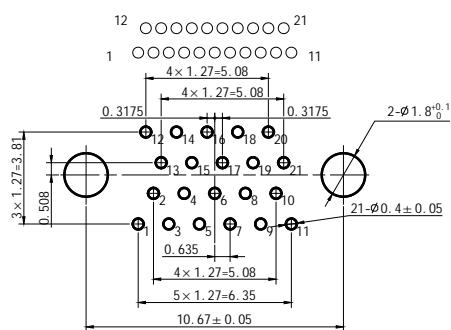
R06-221-S1/S2/S3-25RH-TH



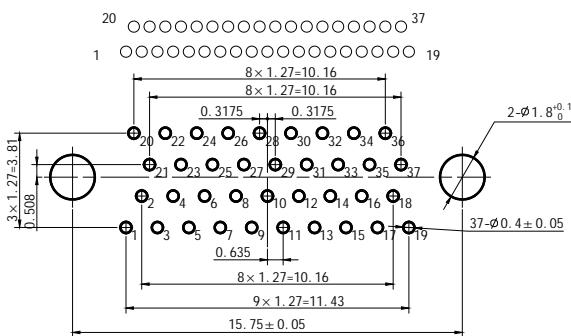
R06-221-S1/S2/S3-15RH-TH



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



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



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

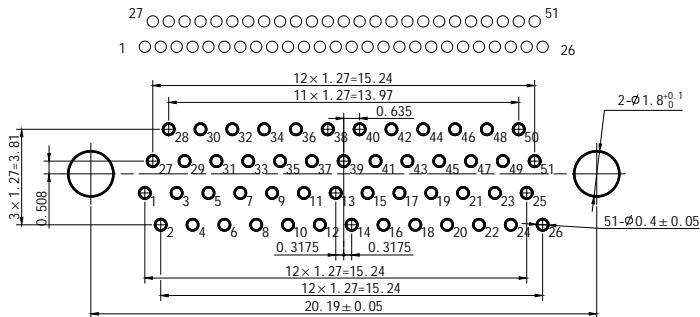
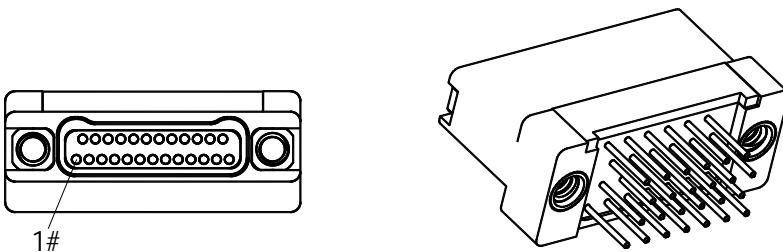
Remark: All dimensions are in mm



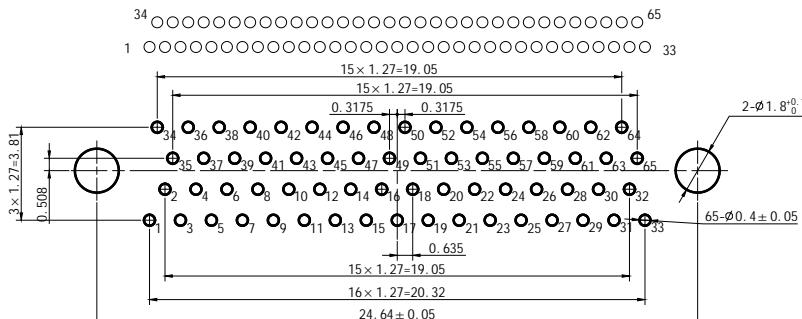
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MIL-DTL-32139 Nano D-sub connectors

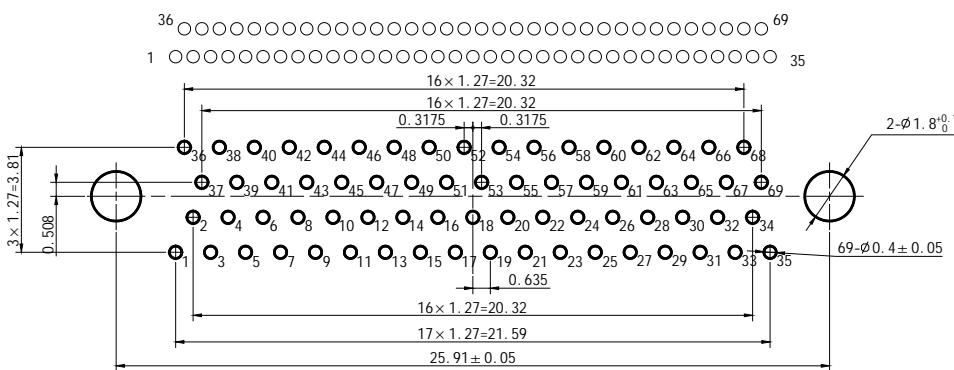
Suggested PCB Layout



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

