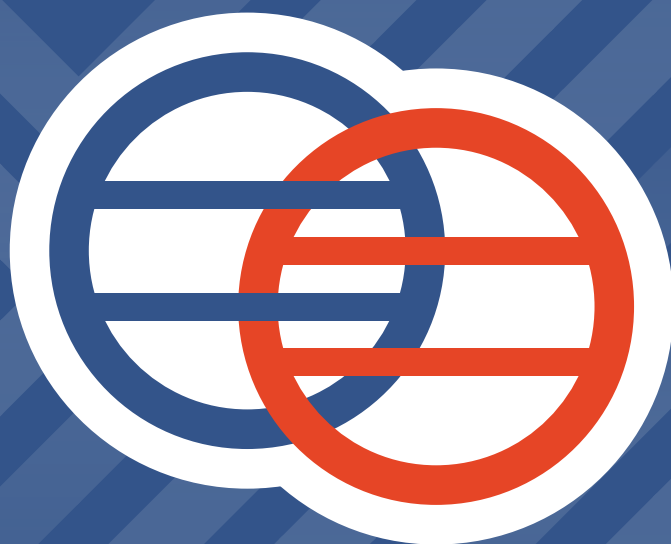




MATENG

J30 SERIES

CATALOG

J30 SERIES MICRO MINIATURE CONNECTOR

DESCRIPTION

- Conform to GJB2446 (MIL-C-83513)
- Twist pin used on male contact
- High density contact, 1.27mm pattern
- Using plastic shell, equivalent to American MD Series
- 9~74 contacts, 8 different types
- Termination can be modified to adjust to contact pattern for PCB
- Enterprise standard: 21E0.204.118JT

PRODUCT TYPE

- J30 series crimped plug and receptacle:
Crimped termination
- J30 series straight PCB plug and receptacle:
According to grid pattern, there are three types:
 - Type N:2.54×1.6
 - Type N1:2.54×2.54
 - Type N-J:1.27×2.54
- J30 series right angle PCB plug and receptacle:
According to grid pattern, there are two types:
 - Type W:2.54×2.54
 - Type W-J:1.27×2.54

MAIN TECHNICAL PERFORMANCE

- Operating temperature: -55°C ~+125°C
- Relative humidity: 95% at 40°C
- Vibration: Frequency 10~2000Hz
Acceleration 196m/s²
- Shock: Acceleration 735m/s²
- Rated current: 3A
- Withstanding voltage: 800V (normal)
100V (heat & damp)
- Insulation resistance: ≥5000MΩ(normal)
≥100MΩ(heat & damp)
- Contact resistance: ≤20mΩ
- Durability: 500 cycles

HOW TO ORDER

J30-9-ZK-N1

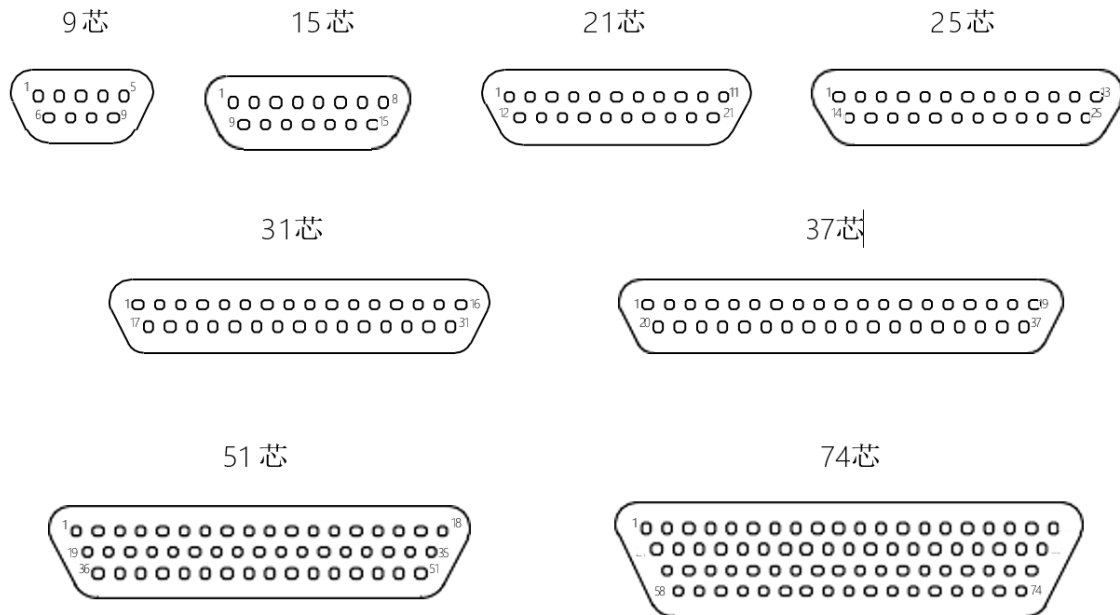
1 2 3 4

Nº	Type characteristic	Content	Mark
1	Basic series	Micro miniature plastic shell connector	J30
2	Number of contact	9, 15, 21, 25, 31, 37, 51, 74	Mark the figure
3	Connector type	Plug with pins	TJ
		Receptacle with sockets	ZK
4	Termination	Crimped	No marking
		Straight PCB modification	N, N1, N-J
		Right angle PCB modification	W, W-J

ORDERING PART NUMBER EXAMPLE:

For example: J30 series electrical connector with 15 contacts. Plug is loaded with 15 twisted pins and the termination is crimped, P/N of plug should be J30-15TJ; Receptacle is loaded with sockets and the termination is right angle PCB modification (2.54×2.54), P/N of receptacle should be J30-15ZKW. P/N of the electrical connector should be J30-15ZKW/TJ

INSERT ARRANGEMENT (VIEW FROM MATING FACE OF PLUG)



ORDERING INSTRUCTION

I. Crimped product ordering instruction.

1. If customer has no special request, wire for J30 series will be AFR-250-0.12-250V-white L=120mm.

2. If there is any special request, please state the content as following.

—Wire cross section area: clearly state the value for wire. If no statement, there should be 0.12mm².

Section area for wires used on J30 is 0.07~0.15 mm².

—Wire color: color should be stated clearly. Otherwise, color will be white.

—Wire length: unit is mm. Length is calculated from the surface of the shell. Normal length is 120mm.

Note:

—When the cross section of 0.07mm² is chosen, (0.07) is added behind P/N, the wire color and length should be marked in P/N.

For example:

—When J30-25TJ is ordered and AFR-250-0.07 red wire with 0.6m of the length is required, P/N will be J30-25TJ (0.07 red L600), the marking should be J30-25TJ (0.070).

—When the other cross section is selected, cross section, color and length should be marked behind P/N.

For example:

When J30-25TJ is ordered and AFR-250-0.1 red wire with 0.6m of the length is required, P/N will be J30-25TJ (0.1 red L600), the marking should be J30-25TJ.

3. If customer has special request (for example, wire not specified in the manual is selected and wiring not specified in the manual is selected), that should be stated in the purchase order.

II. Ordering P/N instruction on products with locking assemblies.

To facilitate the customer's use, there are different kinds of locking assemblies, see J30 series locking assemblies for more detail. Locking assemblies can either be ordered separately according to code or can be ordered with matched products. When ordered with matched products, ordering P/N designates P/N+ locking assemblies' code.

For example:

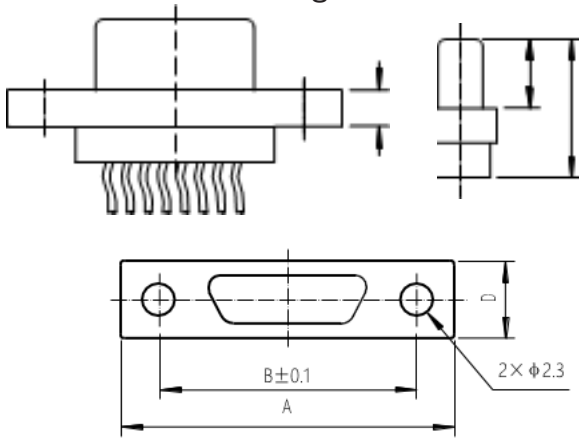
—Plug J30-15TJW can be matched with the locking assembly 21E6-040-024-B1; therefore, the ordering P/N should be J30-15TJW+21E6-040-024-B1.

—Receptacle J30-51ZK can be matched with the locking assembly 21E6-040-024-B1 and AFR-250-0.07 blue wire with 1m of length is required, therefore, the ordering P/N should be J30-51ZK (0.07 blue L1000) +21E6-040-023-B1.

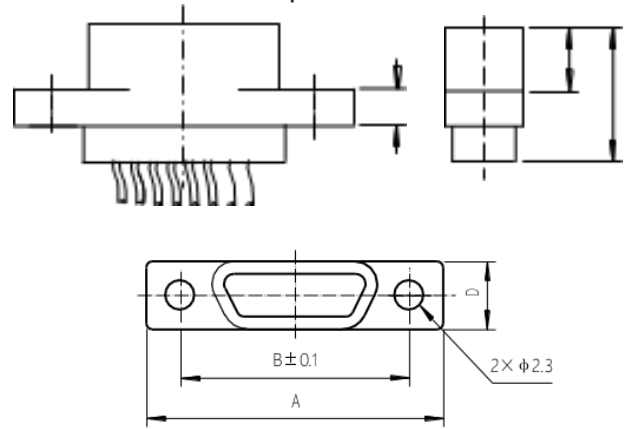
DIMENSIONS

J30 series plug and receptacle

Plug J30-×TJ



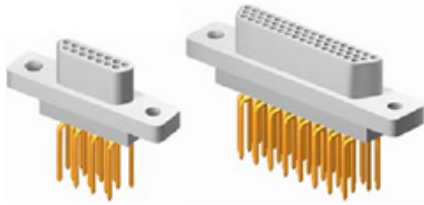
Receptacle J30-×ZK



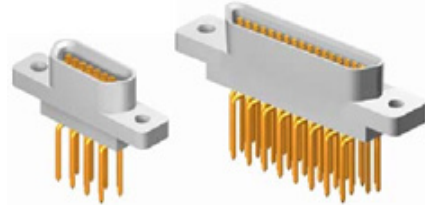
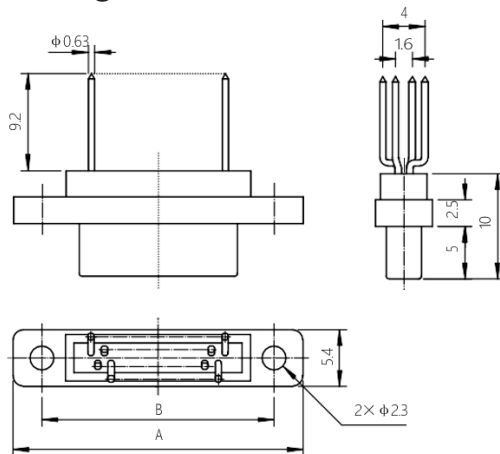
P/N	A	B	D
J30-9TJ	19.8	14.3	5.4
J30-15TJ	23.6	18.2	5.4
J30-21TJ	27.5	22.0	5.4
J30-25TJ	30.0	24.5	5.4
J30-31TJ	33.7	28.3	5.4
J30-37TJ	37.5	32.2	5.4
J30-51TJ	36.2	30.8	6.5
J30-74TJ	38.8	33.5	7.5

P/N	A	B	D
J30-9ZK	19.8	14.3	5.4
J30-15ZK	23.6	18.2	5.4
J30-21ZK	27.5	22.0	5.4
J30-25ZK	30.0	24.5	5.4
J30-31ZK	33.7	28.3	5.4
J30-37ZK	37.5	32.2	5.4
J30-51ZK	36.2	30.8	6.5
J30-74ZK	38.8	33.5	7.5

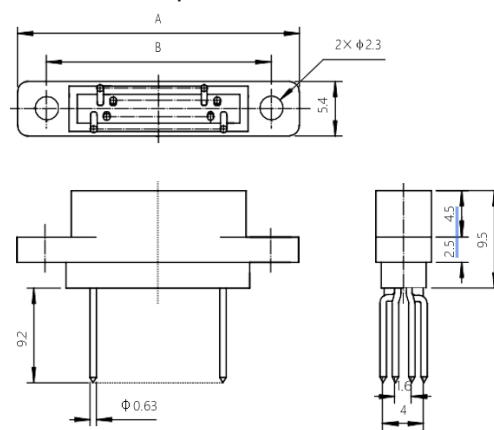
J30 Series Straight PCB Plug and Receptacle (Type N)



Plug J30-9~37TJN



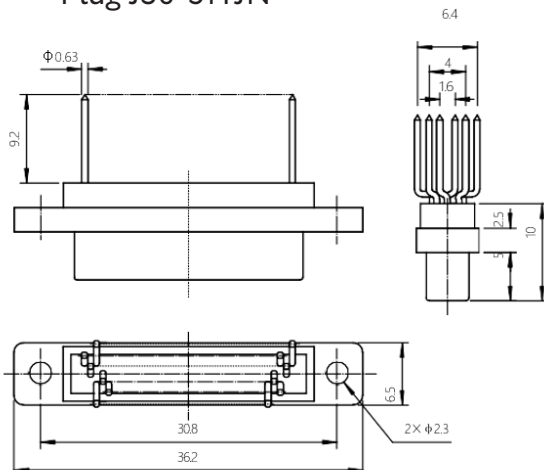
Receptacle J30-9~37ZKN



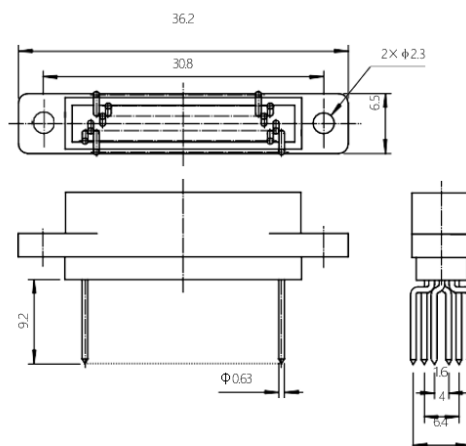
P/N	A	B
J30-9TJN	19.8	14.3
J30-15TJN	23.6	18.2
J30-21TJN	27.5	22.0
J30-25TJN	30.0	24.5
J30-31TJN	33.7	28.3
J30-37TJN	37.5	32.2

P/N	A	B
J30-9ZKN	19.8	14.3
J30-15ZKN	23.6	18.2
J30-21ZKN	27.5	22.0
J30-25ZKN	30.0	24.5
J30-31ZKN	33.7	28.3
J30-37ZKN	37.5	32.2

Plug J30-51TJN

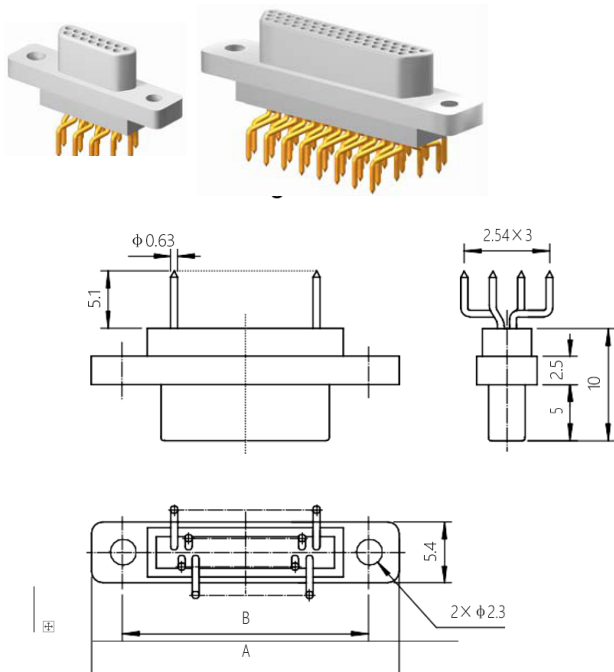


Receptacle J30-51ZKN



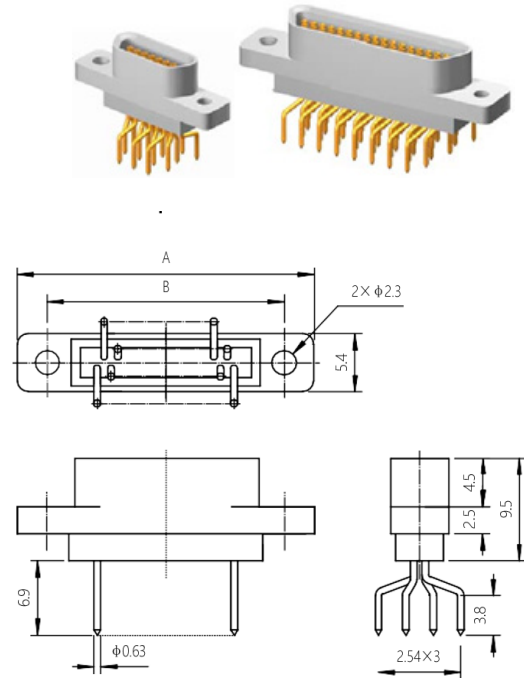
J30 Series Straight PCB Plug and Receptacle (Type N1)

Plug J30-9~37TJN1



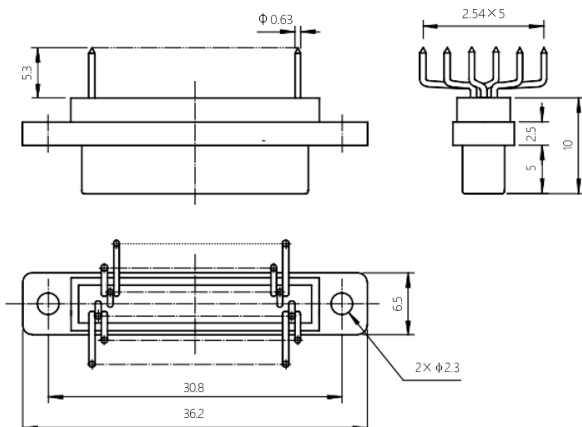
P/N	A	B
J30-9TJN1	19.8	14.3
J30-15TJN1	23.6	18.2
J30-21TJN1	27.5	22.0
J30-25TJN1	30.0	24.5
J30-31TJN1	33.7	28.3
J30-37TJN1	37.5	32.2

Receptacle J30-9~37ZKN1

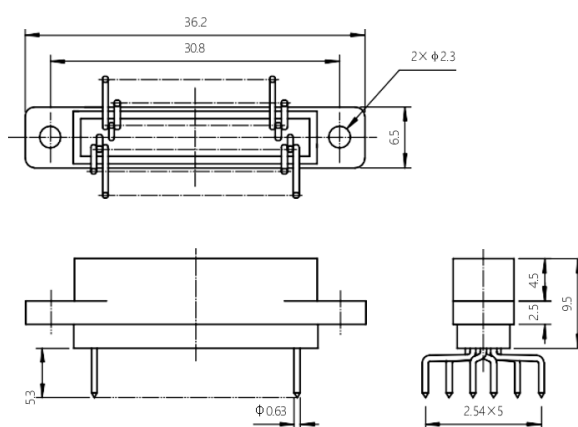


P/N	A	B
J30-9ZKN1	19.8	14.3
J30-15ZKN1	23.6	18.2
J30-21ZKN1	27.5	22.0
J30-25ZKN1	30.0	24.5
J30-31ZKN1	33.7	28.3
J30-37ZKN1	37.5	32.2

Plug J30-51TJN1

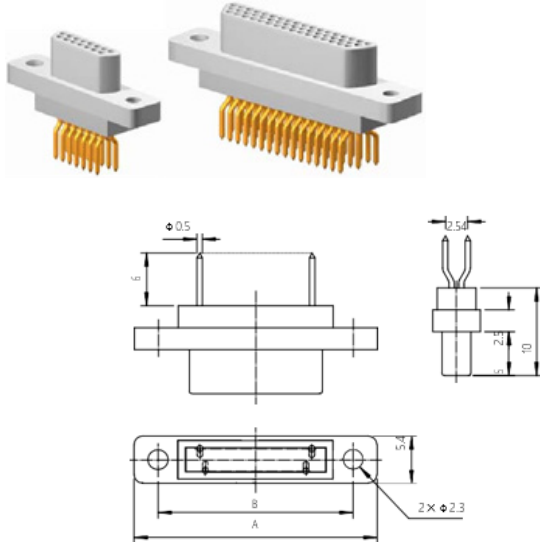


Receptacle J30-51ZKN1



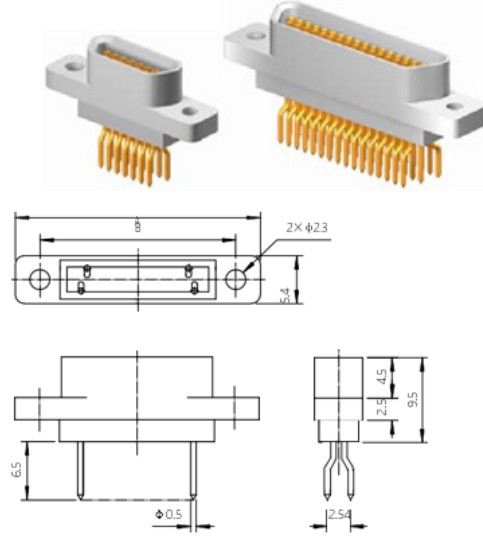
J30 Series Straight PCB Plug and Receptacle (Type N-J)

Plug J30-9~37TJN-J



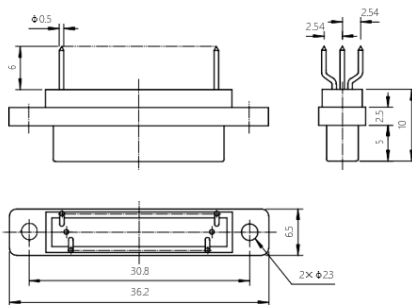
P/N	A	B
J30-9TJN-J	19.8	14.3
J30-15TJN-J	23.6	18.2
J30-21TJN-J	27.5	22.0
J30-25TJN-J	30.0	24.5
J30-31TJN-J	33.7	28.3
J30-37TJN-J	37.5	32.2

Receptacle J30-9~37ZKN-J

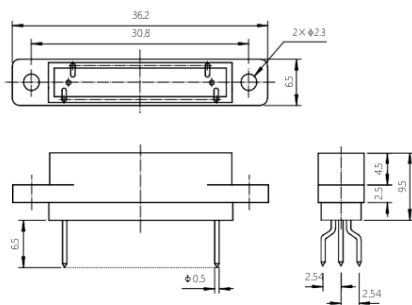


P/N	A	B
J30-9ZKN-J	19.8	14.3
J30-15ZKN-J	23.6	18.2
J30-21ZKN-J	27.5	22.0
J30-25ZKN-J	30.0	24.5
J30-31ZKN-J	33.7	28.3
J30-37ZKN-J	37.5	32.2

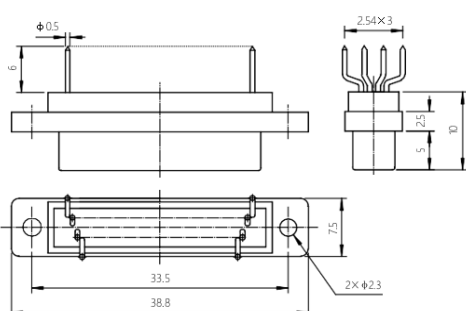
Plug J30-51TJN-J



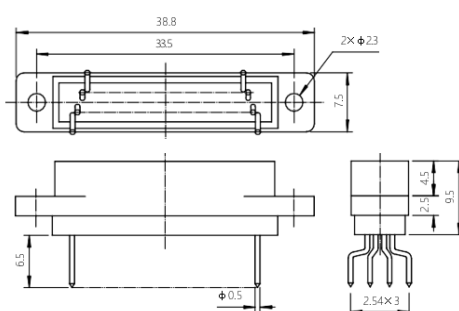
Receptacle J30-51ZKN-J



Plug J30-74TJN-J

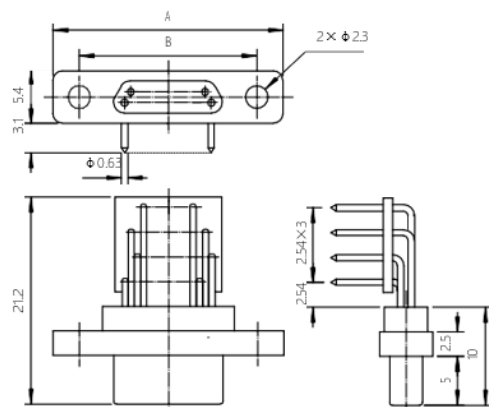


Receptacle J30-74ZKN-J



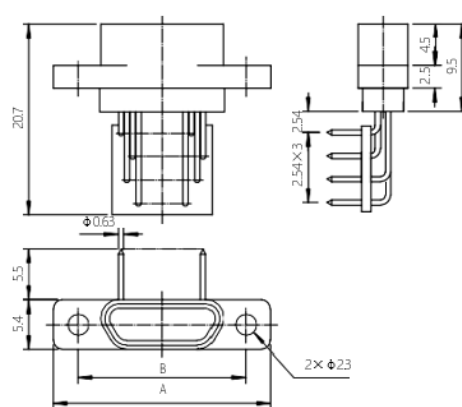
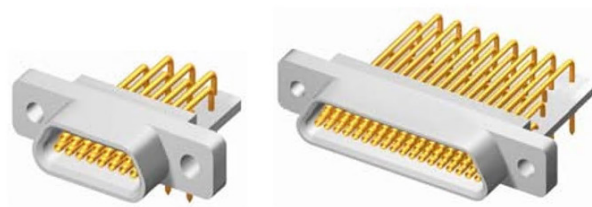
J30 Series Right Angle PCB Plug and Receptacle (Type W)

Plug J30-9~37TJW



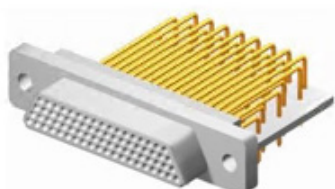
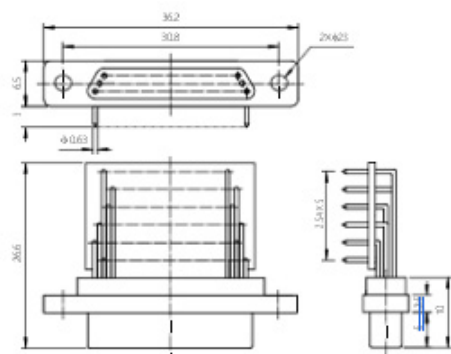
P/N	A	B
J30-9TJW	19.8	14.3
J30-15TJW	23.6	18.2
J30-21TJW	27.5	22.0
J30-25TJW	30.0	24.5
J30-31TJW	33.7	28.3
J30-37TJW	37.5	32.2

Receptacle J30-9~37ZKW

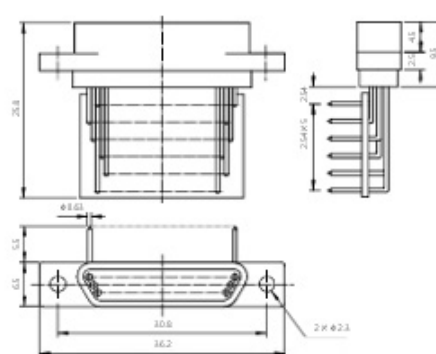


P/N	A	B
J30-9ZKW	19.8	14.3
J30-15ZKW	23.6	18.2
J30-21ZKW	27.5	22.0
J30-25ZKW	30.0	24.5
J30-31ZKW	33.7	28.3
J30-37ZKW	37.5	32.2

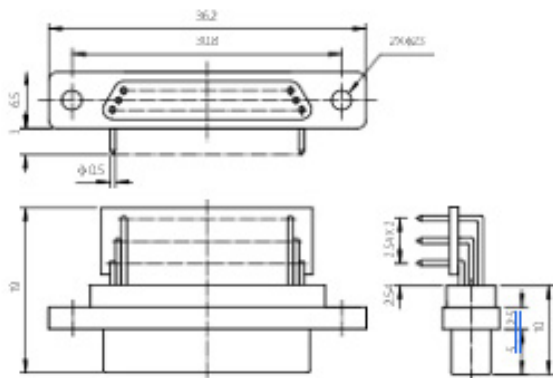
Plug J30-51TJW



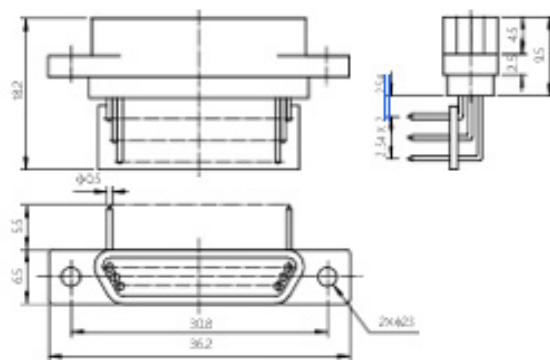
Receptacle J30-51ZKW



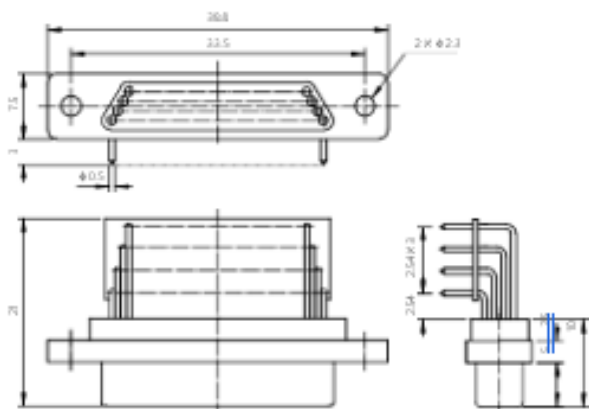
Plug J30-9~37TJW



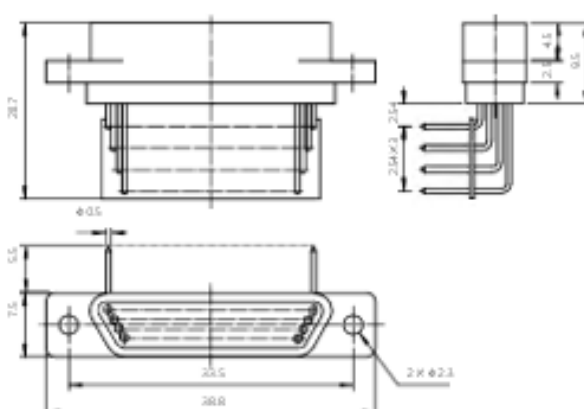
Receptacle J30-9~37ZKW



Plug J30-74TJW-J



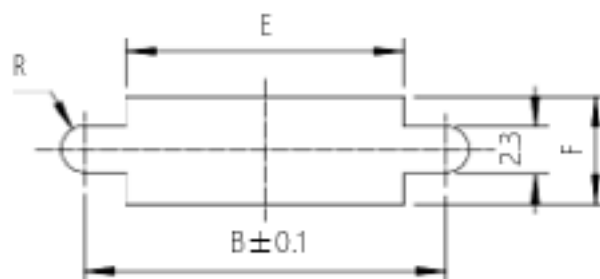
Receptacle J30-74ZKW-J



DIMENSIONS

Cut-out dimension for receptacle front panel mounting.

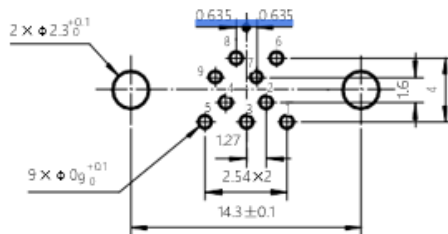
Size	B	E	F
J30-9	14.3	10.1	4.6
J30-15	18.2	14.2	4.6
J30-21	22.0	17.9	4.6
J30-25	24.5	20.8	4.6
J30-31	28.3	24.2	4.6
J30-37	32.2	28.2	4.6
J30-51	30.8	26.9	5.9
J30-74	33.5	29.7	6.8



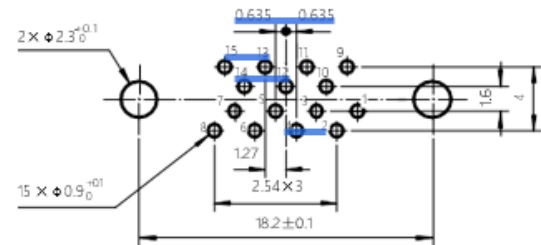
RECOMMENDED PCB CUT-OUT DIMENSIONS

J30-×TJNPlug PCB cut-out dimensions (grid pattern 2.54×1.6)

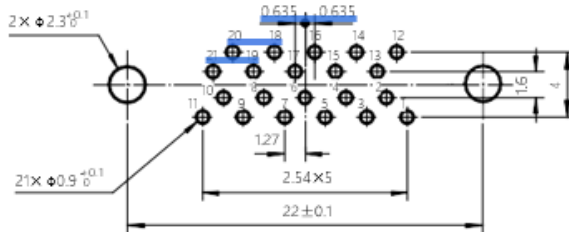
J30 -9TJN



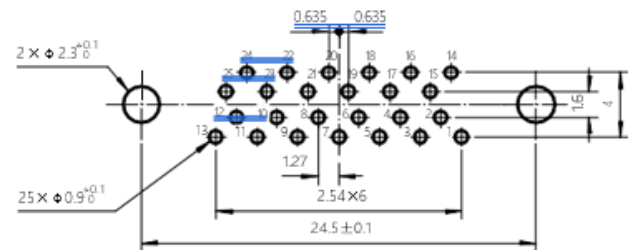
J30-15 TJN



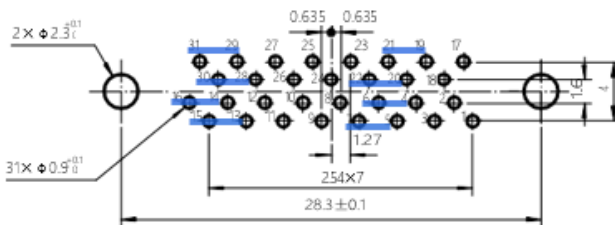
J30 -21TJN



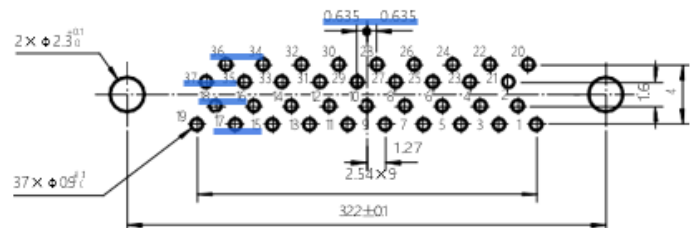
J30-25TJN



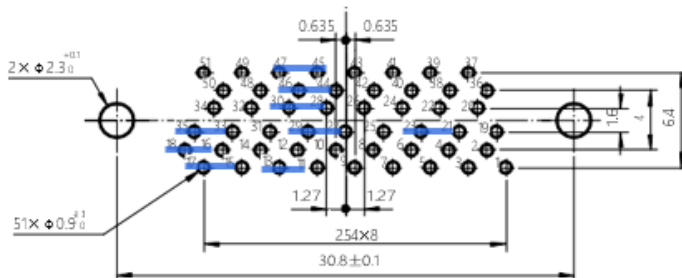
J30-31TJN



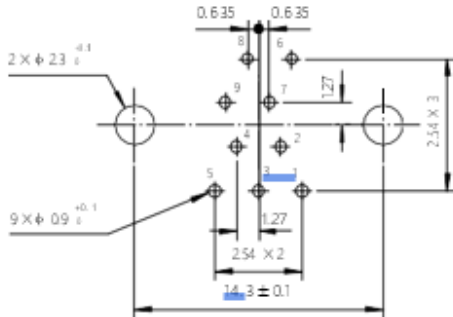
J30- 37TJN



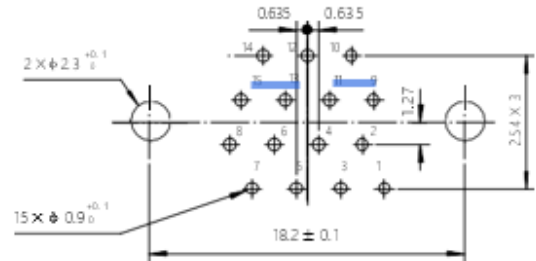
J30-51 TJN



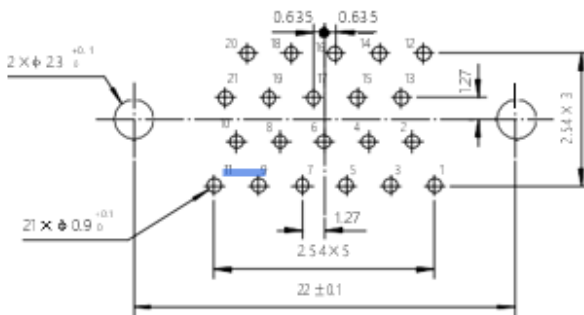
J30- $\times$ TJN1 plug PCB cut-out dimensions (grid pattern 2.54 $\times$ 2.54)



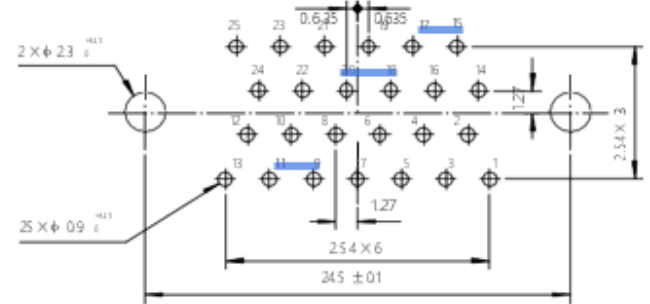
J30-21TJN1



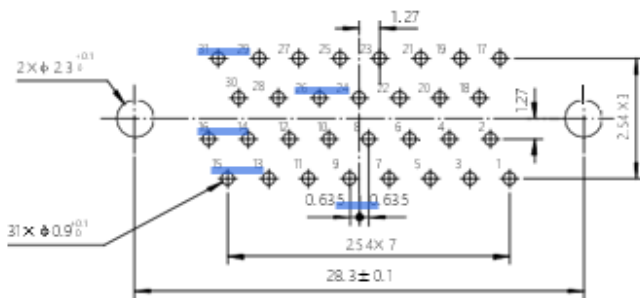
J30-25TJN1



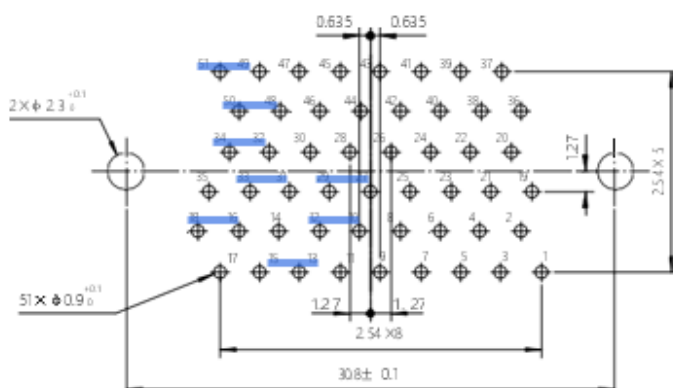
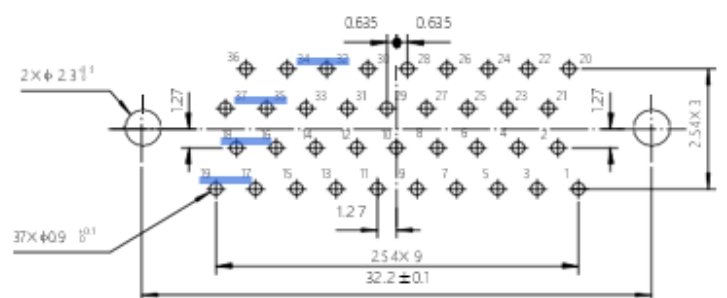
J30-31TJN1



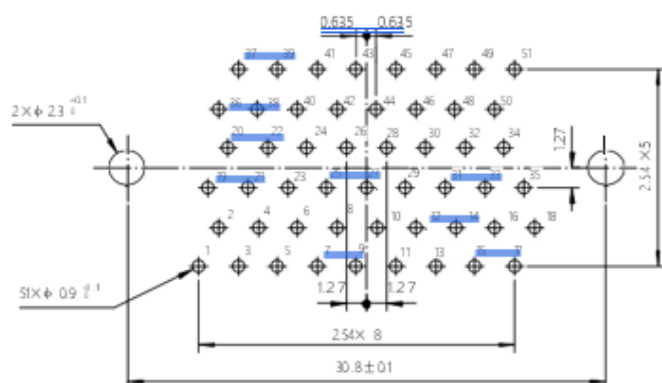
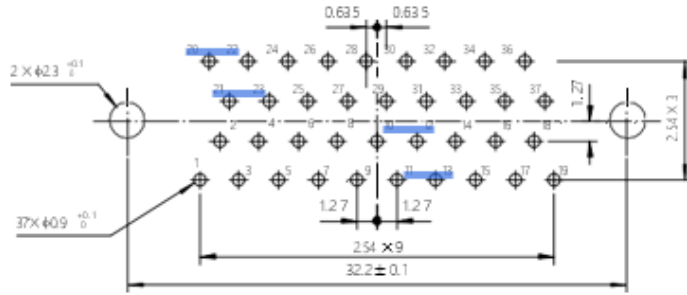
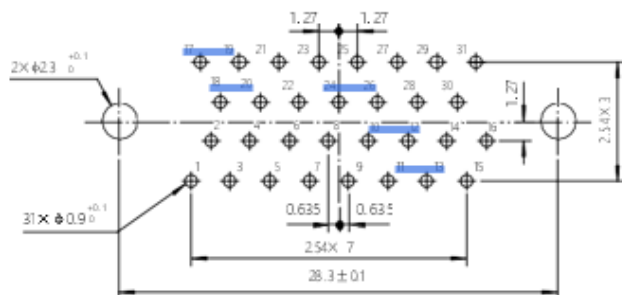
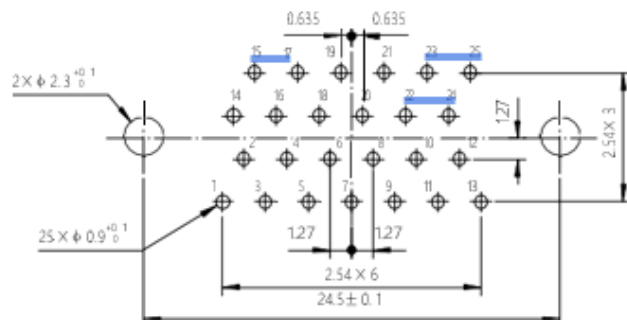
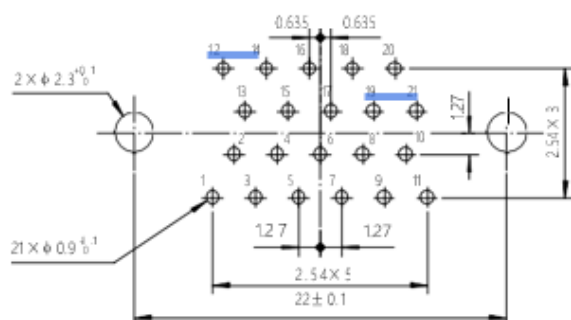
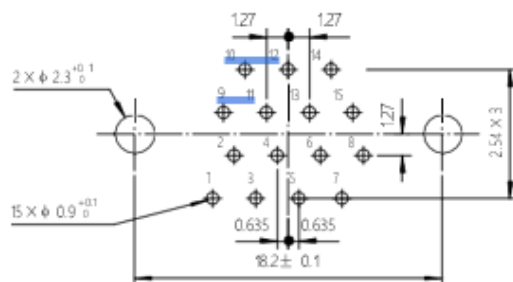
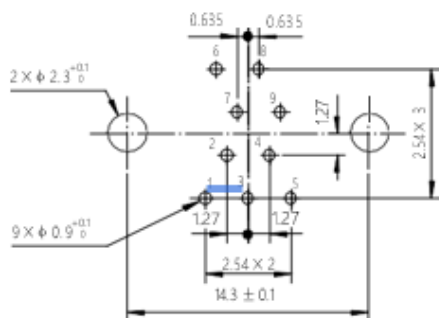
J30-37TJN1



J30-51TJN1

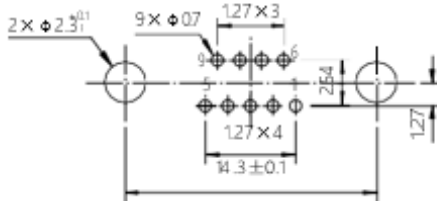


J30-xZKN1 receptacle PCB cut-out dimensions (grid pattern 2.54×2.54)

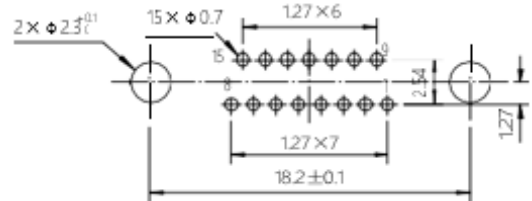


J30- $\times$ TJN-J plug PCB cut-out dimensions (grid pattern 1.27 $\times$ 2.54)

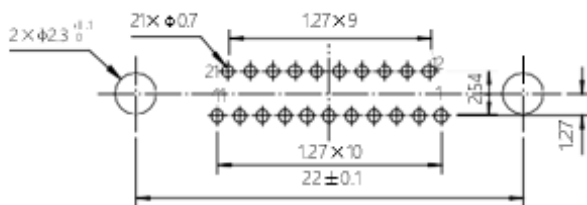
J30-9TJN-J



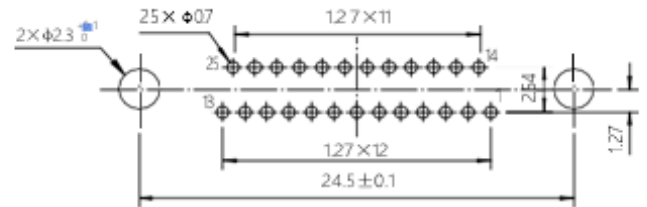
J30-15TJN-J



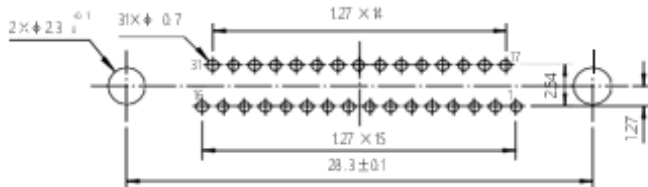
J30-21TJN-J



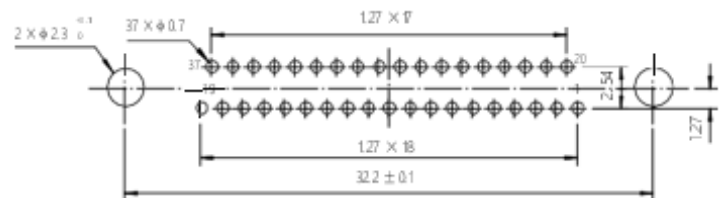
J30-25TJN-J



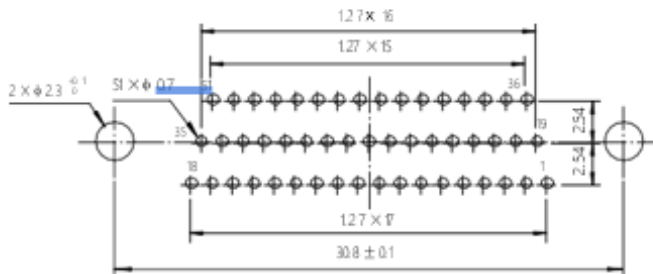
J30-31TJN-J



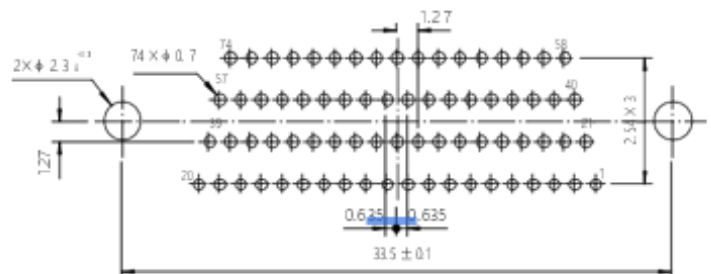
J30-37TJN-J



J30-51TJN-J

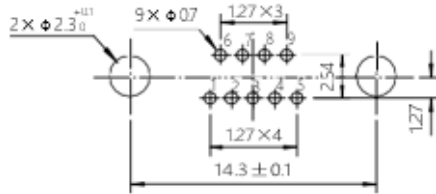


J30-74TJN-J

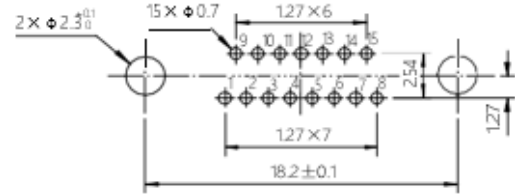


J30-×ZKN-J receptacle PCB cut-out dimensions (grid pattern 1.27×2.54)

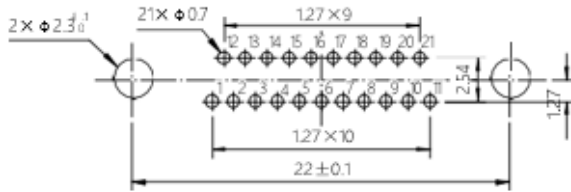
J30- 9ZKN-J



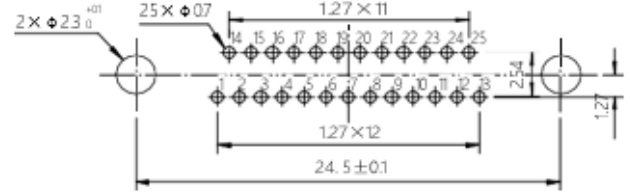
J30-15ZKN-J



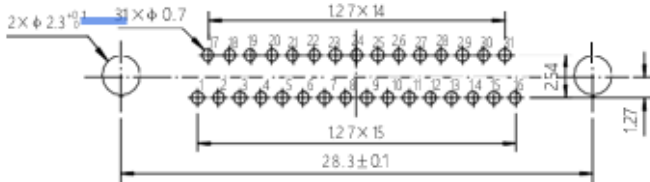
J30-21ZKN-J



J30-25ZKN-J



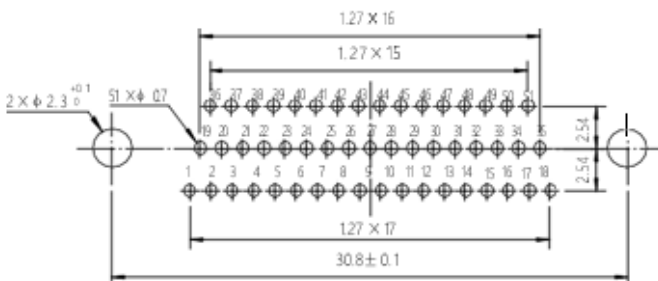
J30-31ZKN-J



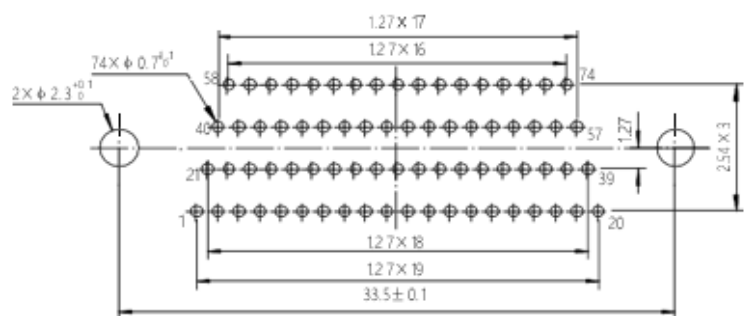
J30-37ZKN-J



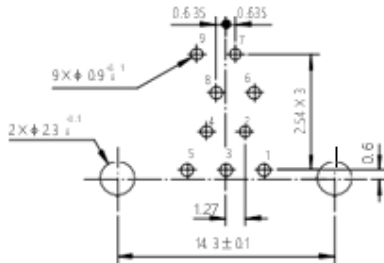
J30-51ZKN-J



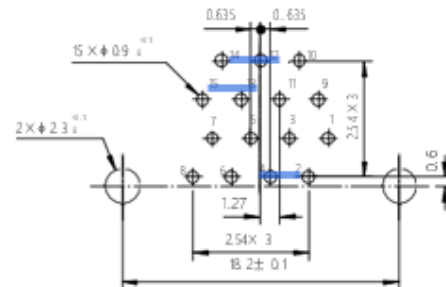
J30-74ZKN-J



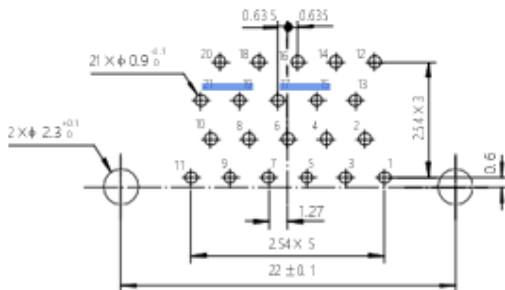
J30- $\times$ TJW plug PCB cut-out dimensions (grid pattern 2.54 $\times$ 2.54)



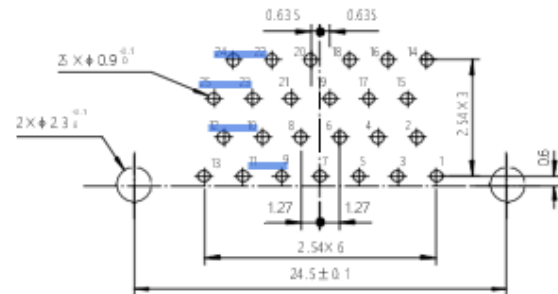
J30-21TJW



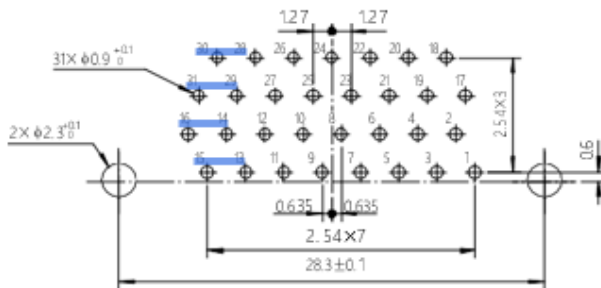
J30-25TJW



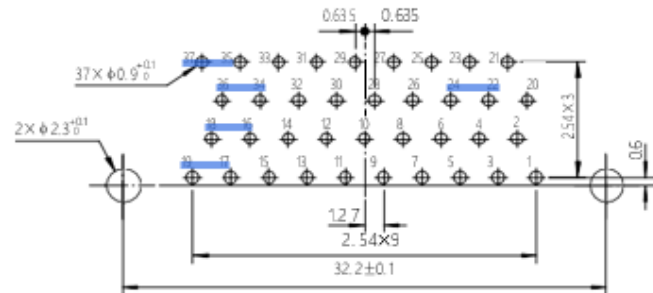
J30-31TJW



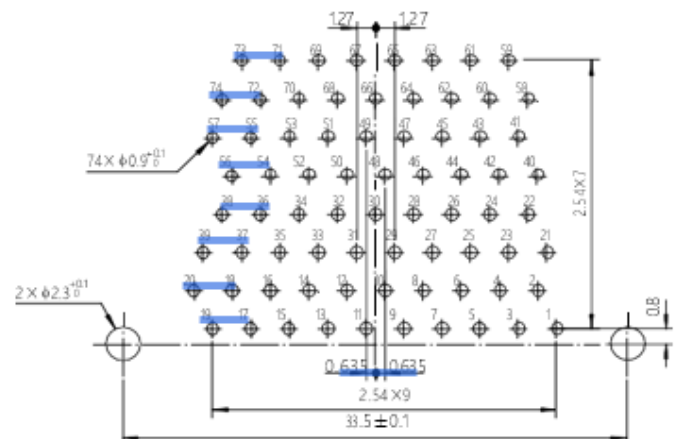
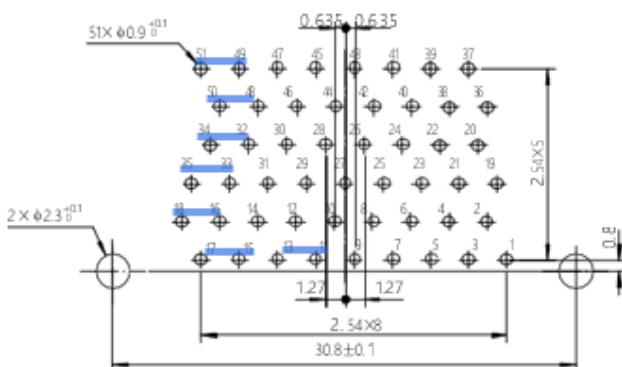
J30-37TJW



J30-51TJW

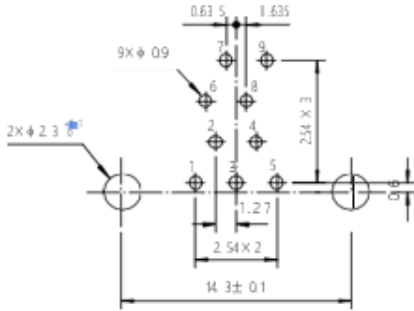


J30-74TJW

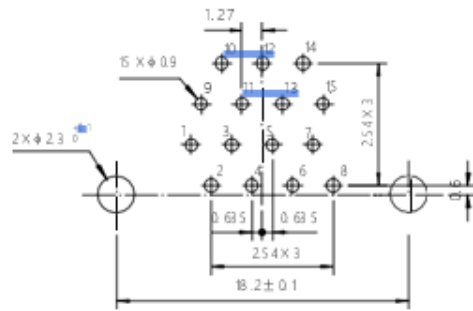


J30-×ZKW receptacle PCB cut-out dimensions (grid pattern 2.54×2.54)

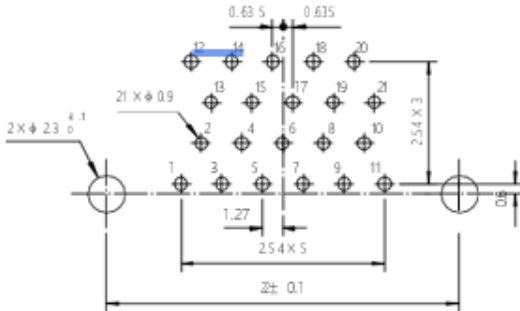
J30 - 9Z KW



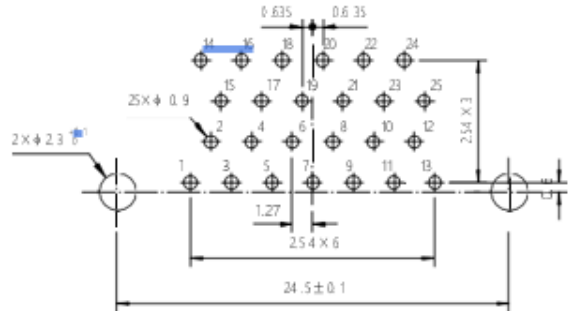
J30 - 15Z KW



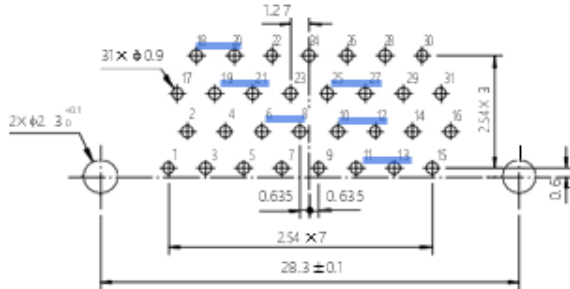
J30 - 21 ZKW



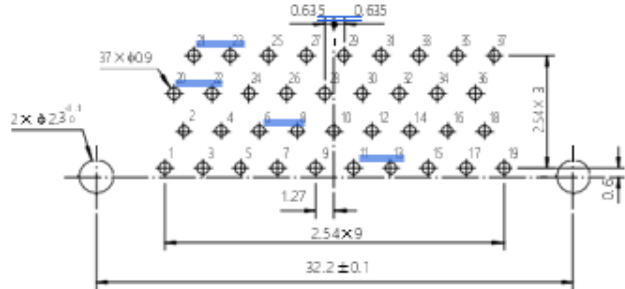
J30 - 25 Z KW



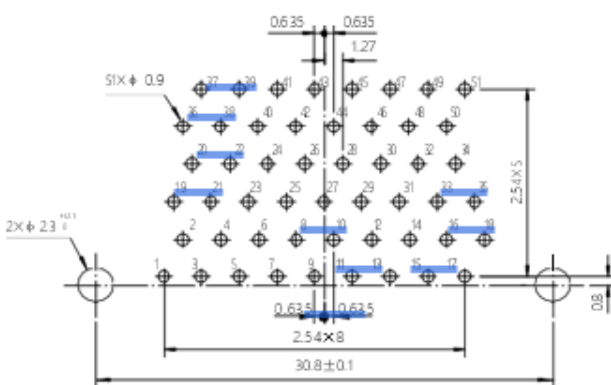
J30-31ZKW



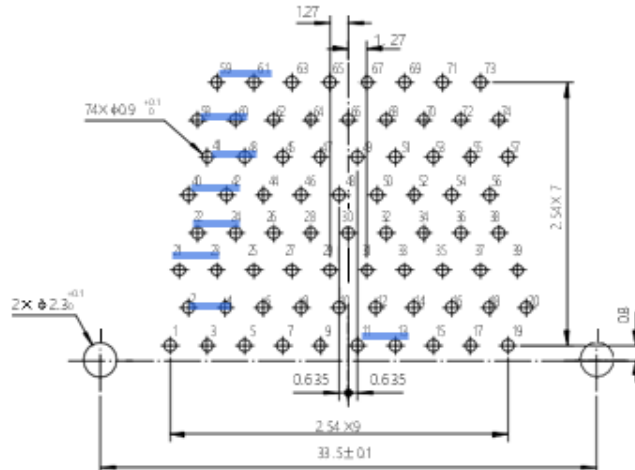
J30-37ZKW



J30-51ZKW

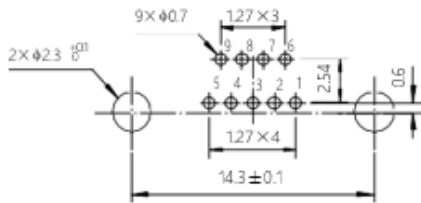


J30-74ZKW

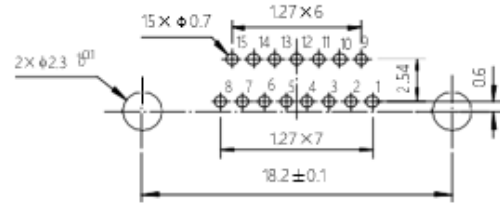


J30- $\times$ TJW-J plug PCB cut-out dimensions (grid pattern 1.27 $\times$ 2.54)

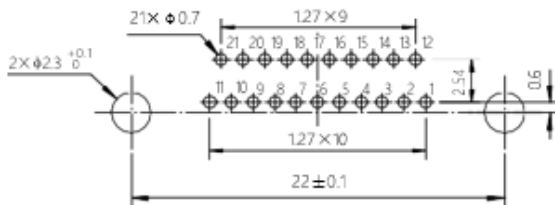
J30-9TJW-J



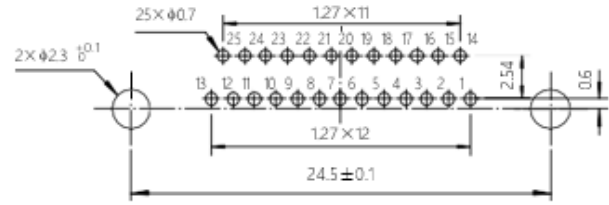
J30-15TJW-J



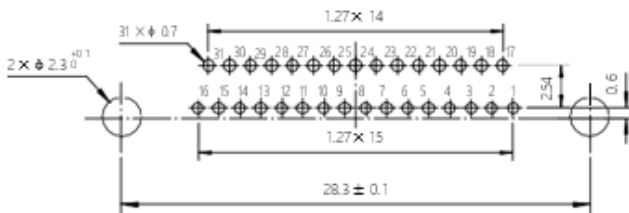
J30-21TJW-J



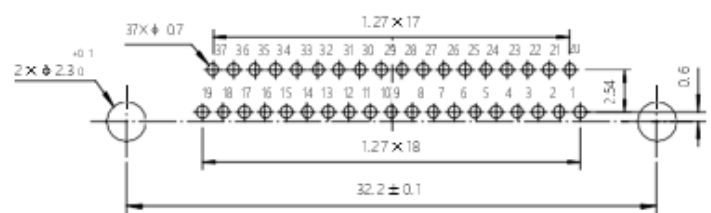
J30-25TJW-J



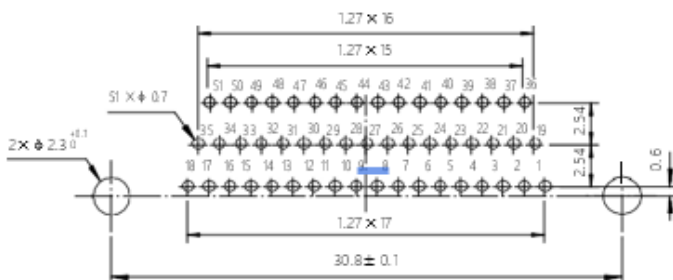
J30-31TJW-J



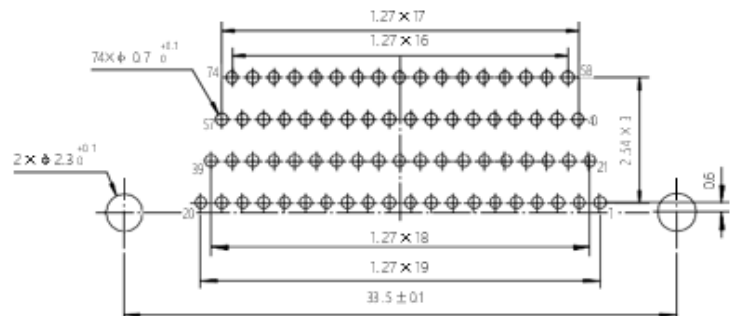
J30-37TJW-J



J30-51TJW-J



J30-74TJW-J

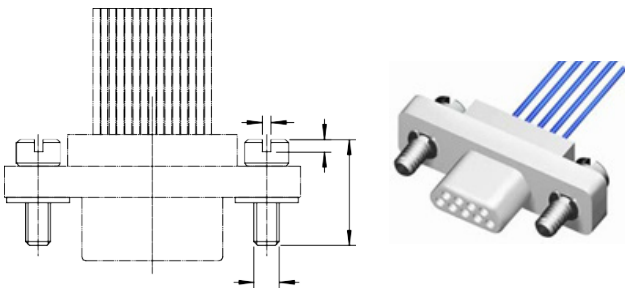


J30 SERIES LOCKING AND INSTALLATION ASSEMBLIES

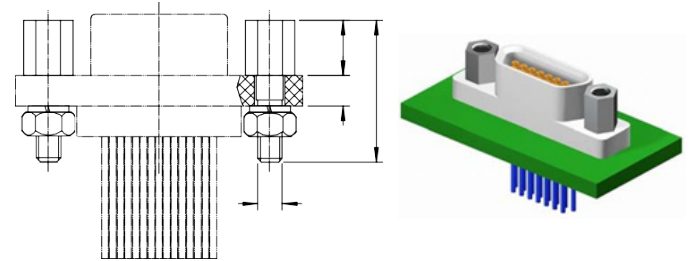
Class	Description	Ordering code	Note
Locking assemblies	The locking assembly is used for locking after the plug mates with the receptacle, it can be matched with crimped plug	21E6-040-022-B1 21E6-040-076-B1	The locking assembly can be matched with the installation assembly.
Installation assemblies	The installation assembly is used for fixed the products and installation panel or PCB and can be matched with any kind of receptacle	21E6-040-023-B1 21E6-040-024-B1 21E6-040-303-B1 21E6-040-304-B1 21E6-040-025-B1	

OUTLINE DIMENSIONS

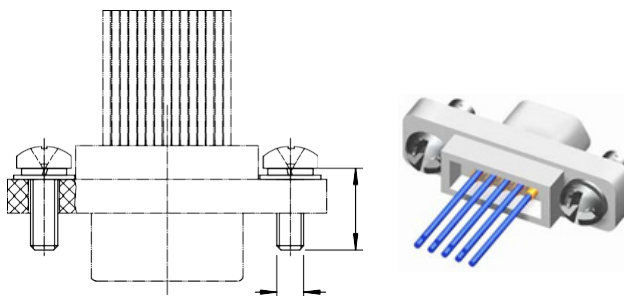
21E6-040-022-B1locking assembly



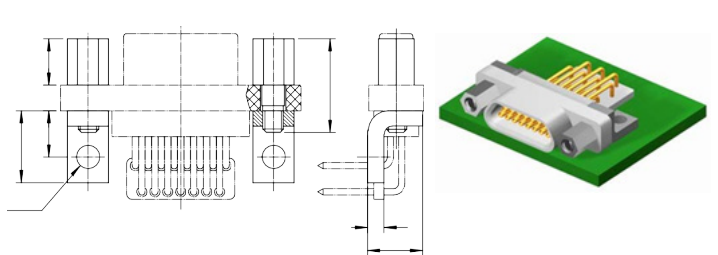
21E6-040-022-B1locking assembly



21E6-040-022-B1locking assembly

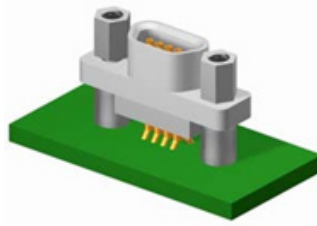
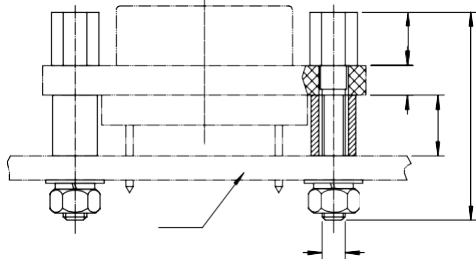


21E6-040-022-B1locking assembly



Applicable product	Locking assembly code	A
J30-9~37 right angle PCB product	21E6-040-024-B1	5.3
J30-51 right angle PCB product	21E6-040-303-B1	6.5
J30-74 right angle PCB product	21E6-040-304-B1	9.7

21E6-040-025-B1 installation assembly



NOTES

Due to PDM update, the locking and installation assemblies are required to change the code of sub-component and the products are ordered according to the current code of sub-component. Only the code of sub-component is changed and the part, dimension and matching relationship are not changed. The product with locking and installation assemblies with the new code can be matched with the product with locking and installation assemblies with the old code.

COMPARISON OF LOCKING AND INSTALLATION ASSEMBLIES WITH OLD AND NEW CODE

New code	Old code
21E6-040-022-B1	21E6.040.022
21E6-040-023-B1	21E6.040.023
21E6-040-024-B1	21E6.040.024-1
21E6-040-303-B1	21E6.040.024-2
21E6-040-304-B1	21E6.040.024-3
21E6-040-025-B1	21E6.040.025

J30D SERIES MICRO-MINIATURE CONNECTOR

DESCRIPTION

- Micro-miniature connector, spacing 1.27×2.54mm.
- Plug with pins, right angle PCB; Receptacle with rigid socket, solder cup.
- Guide pin and guide socket can make locking after being mated.
- Contact arrangement: 51, 31, 23, 21, 15.
- Interchangeable with DRS/DRP series products manufactured by OMNETICS company.
- Enterprise standard: 21E0.204.118JT.

MAIN TECHNICAL PERFORMANCE

Mechanical

- Vibration: 10~2000Hz, acceleration 196m/s².
- Shock Acceleration: 735m/s².
- Durability: 500 cycles.

Electrical

- Contact size: 0.56mm.
- Rated current: 3A.
- Contact resistance: ≤20mΩ.
- Withstanding voltage: 800V.
- Insulation resistance: ≥5000MΩ (normal); ≥1000MΩ (heat & damp).

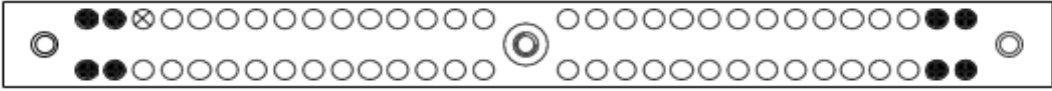
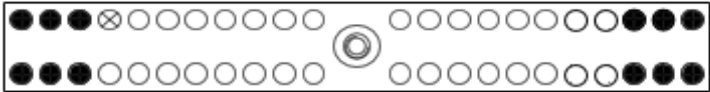
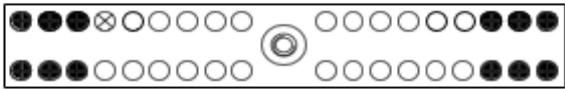
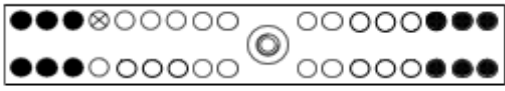
Environmental

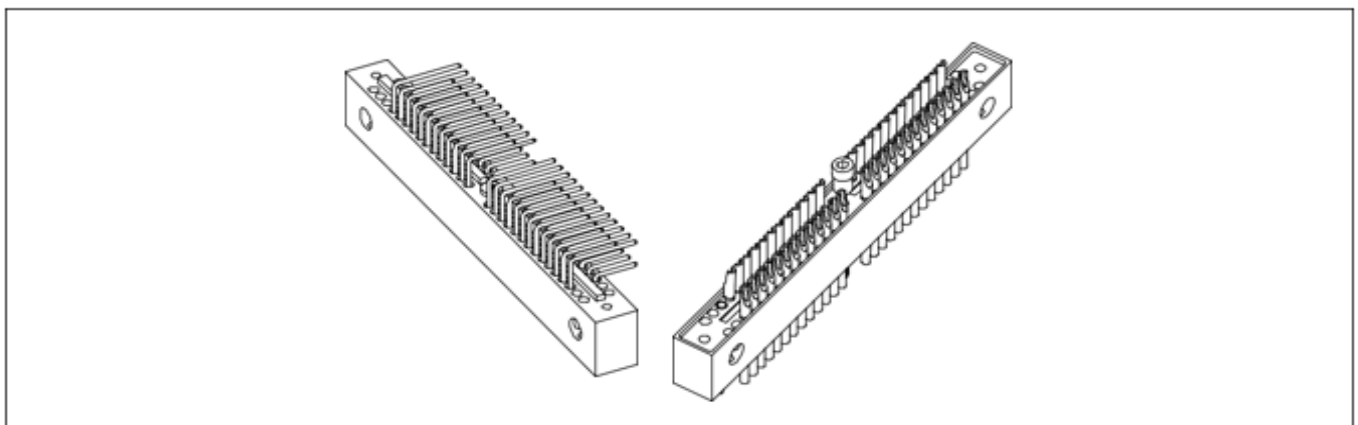
- Operating temperature: -55~ +125°C.

HOW TO ORDER

Basic series		J30D	-15	ZK	S
Number of contact	15, 21, 23, 31, 51				
Connector type	ZK Receptacle with sockets	TJ Plug with pins			
Termination	S Solder cup (Socket)	W Right angle PCB Pin			

INSERT ARRANGEMENT

Contacts	View from mating face of plug		
51			
31			
23			
21			
15			
	○	●	⊗
	With contact	Without contact	With guide pin



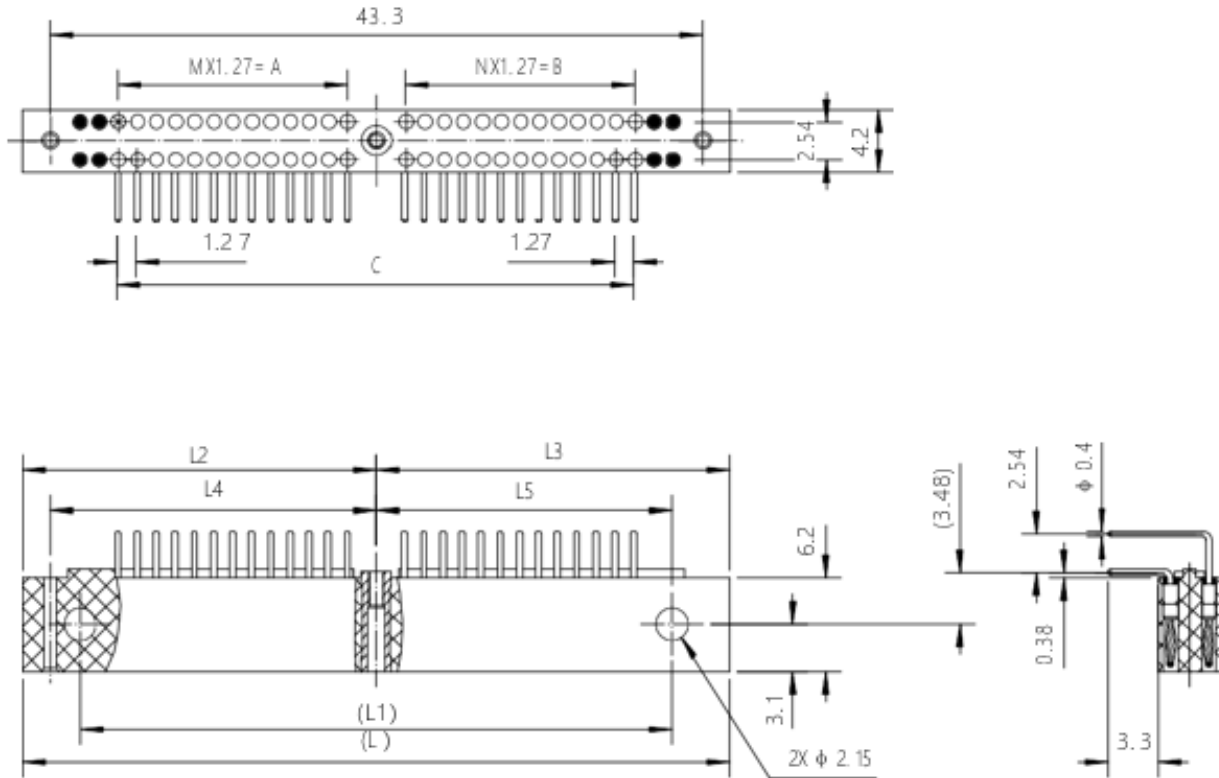
CAVITY IDENTIFICATION

插头孔位标识		
芯数	A 插板孔示意图	B 插板孔示意图
51		
31		
23		
21		
15		

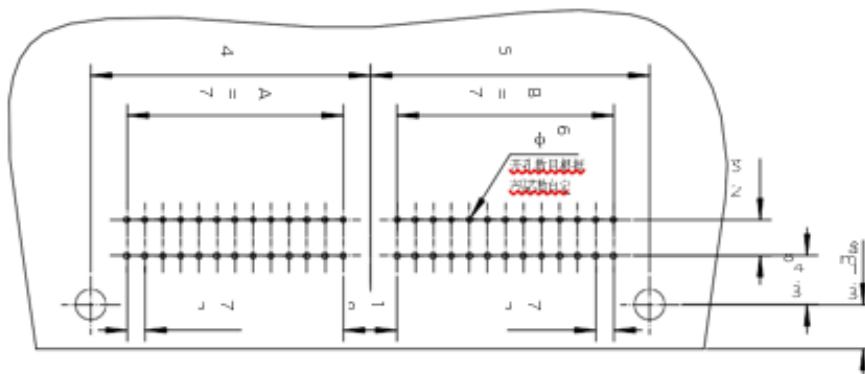
插座孔位标识		
芯数	A 插板孔示意图	B 插板孔示意图
51		
31		
23		
21		
15		

DIMENSIONS

Plug J30D-xxTJW



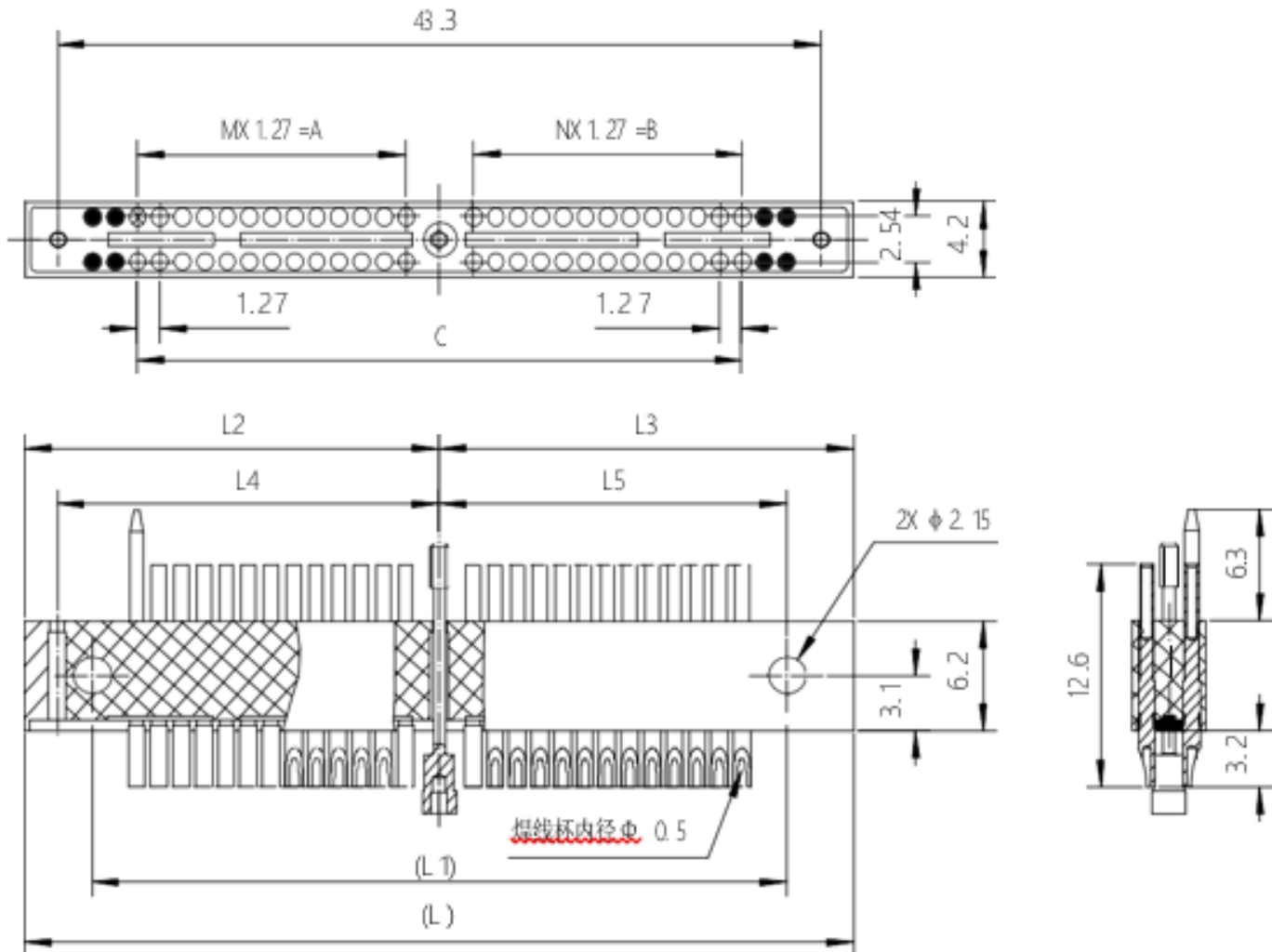
推荐面板开孔尺寸图



P/N	L	L1	L2	L3	L4	L5	A	B	C	M	N
J30D-15TJ W	20.62	16.51	10.31	10.31	8.255	8.255	3.81	3.81	11.43	3	3
J30D-21TJ W	24.43	20.32	12.85	11.58	10.795	9.525	6.35	5.08	15.24	5	4
J30D-23TJ W	25.7	21.59	12.85	12.85	10.795	10.795	6.35	6.35	16.51	5	5
J30D-31TJ W	30.78	26.67	15.39	15.39	13.335	13.335	8.89	8.89	21.59	7	7
J30D-51TJ	46.9	39.3	23.49	23.49	19.68	19.68	15.2	15.2	34.2	12	12
W	9	7	5	5	5	5	4	4	9		

DIMENSIONS

Receptacle J30D-xxZKS



P/N	L	L1	L2	L3	L4	L5	A	B	C	M	N
J30D-15ZKS	20.62	16.51	10.31	10.31	8.255	8.255	3.81	3.81	11.43	3	3
J30D-21ZKS	24.43	20.32	12.85	11.58	10.795	9.525	6.35	5.08	15.24	5	4
J30D-23ZKS	25.7	21.59	12.85	12.85	10.795	10.795	6.35	6.35	16.51	5	5
J30D-31ZKS	30.78	26.67	15.39	15.39	13.335	13.335	8.89	8.89	21.59	7	7
J30D-51ZKS	46.99	39.37	23.495	23.495	19.685	19.685	15.24	15.24	34.29	12	12



MATENG

SHENZHEN MATENG INTERCONNECTION TECHNOLOGY CO., LTD.

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