

Micro-D connector

1.27mm/0.050" pitch

MDS series and Micro-D connectors are with compact and high performance connectors designed and manufactured by JC Electronics Corporation.

- By high reliable precision machining of the contact area is ensures reliable contact even under severe conditions such as vibration, shock and thermal shock.
- Compatible with MIL-DTL-83513 compliant items.
- The contact from 9 to 100 are available. We manufactured the harness assembly in Japan.
- Also supports customer-specific customized products.



Specification (typical)

- Insulation Resistance : 5000MΩ min
- Dielectric Withstanding Voltage : AC600Vrms (Sea level)
- Durability : 500 cycles max
- Current Rating : 3A
- Contact Resistance : 8mΩ max
- Low Signal Level Contact Resistance : 32mΩ max
- Pitch : 1.27mm/0.050inch
- Wire : AWG24~30
- Temperature Range : -45°C~+125°C

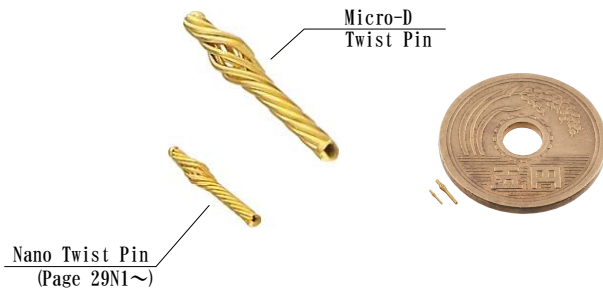
Application:

- Aircraft, Aviation equipment, Missile,
- Small drive equipment, Electronics equipment,
- Satellite, Medical equipment, Measurement equipment,
- Mobile precision equipment, etc.



Materials:

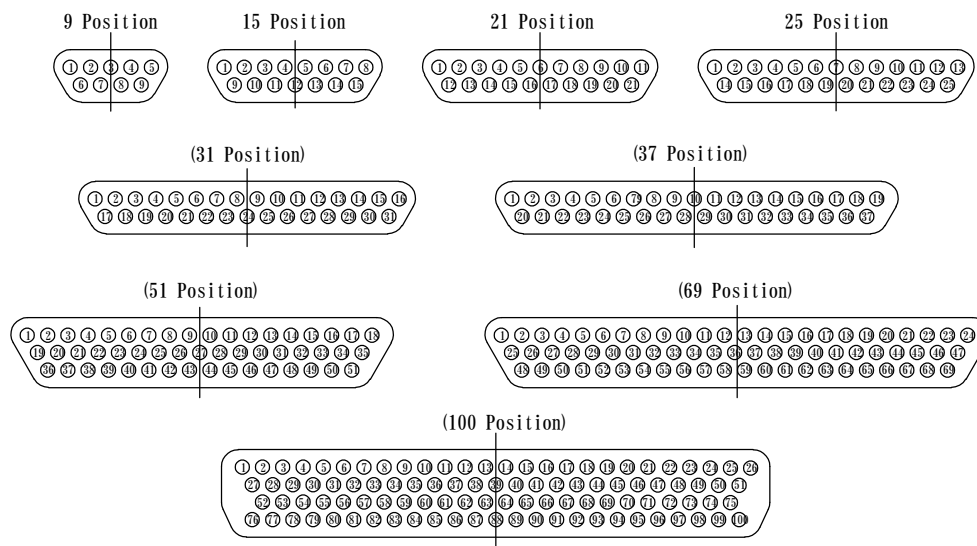
- Shell : Aluminum Alloy
- Insulator : High Temp. Thermoplastic
- Encapsulant : Epoxy Resin (Black)
- Plug Pin : Copper Alloy, Au plating over Ni
- Socket Pin : Copper Alloy, Au plating over Ni



Terminal Type		Code
Solder Cup		SC
Cable type		W
PC Straight Thru Hole Pin		ST

Plugpin Layout

(Receptacle pin layout position numbers are reversed Left to Right.)

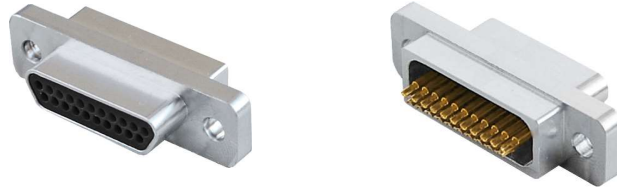


Micro-D Connector for Insulated Wire, Solder Cup type

Wire Soldering type
Metal Shell type

Attention) The products in this page is not with cable.

Plug

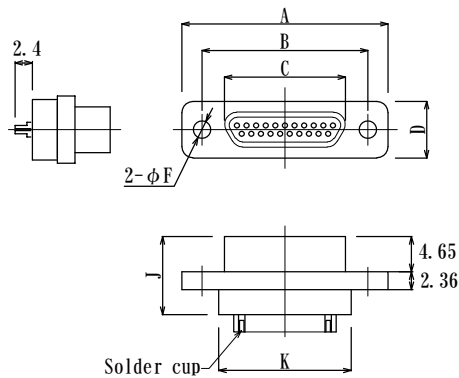


How to Order

MDS□□P-SC-□

No. of Position Code

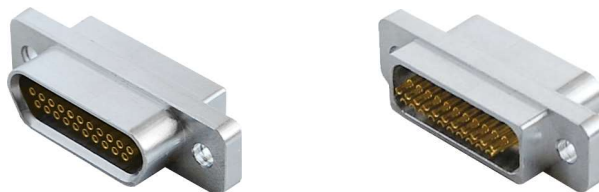
Please refer to Page 29A7, 29A8 for "Mount Hardware".



No. of Position	mm						
	A	B	Cmax	Dmax	ϕF	Jmax	Kmax
9	19.9	14.4	8.5	7.8	2.3	10.6	10.2
15	23.8	18.2	12.3				14.0
21	27.6	22.0	16.1				18.0
25	30.0	24.5	18.6				20.5

Other quantities are made-to-order.

Receptacle

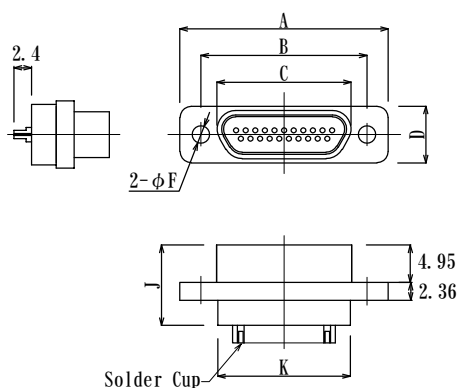


How to Order

MDS□□R-SC-□

No. of Position Code

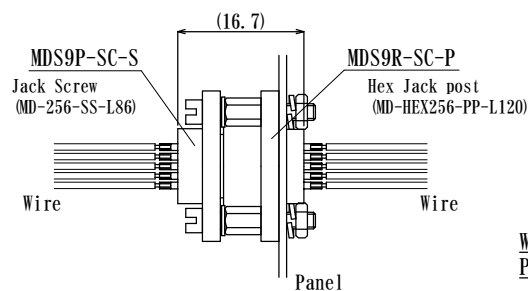
Please refer to Page 29A7, 29A8 for "Mount Hardware".



No. of Position	mm						
	A	B	Cmax	Dmax	ϕF	Jmax	Kmax
9	19.9	14.4	10.2	7.8	2.3	10.9	10.2
15	23.8	18.2	14.0				14.0
21	27.6	22.0	17.8				18.0
25	30.0	24.5	20.4				20.5

Other quantities are made-to-order.

How to Use example)



We also accept cable assembly.
Please contact us.

Micro-D connector with Insulated Wire

With Cable type
Wire Crimping type
Metal Shell type



Plug

How to order

MDS□□P-W-□□L1000-W-□

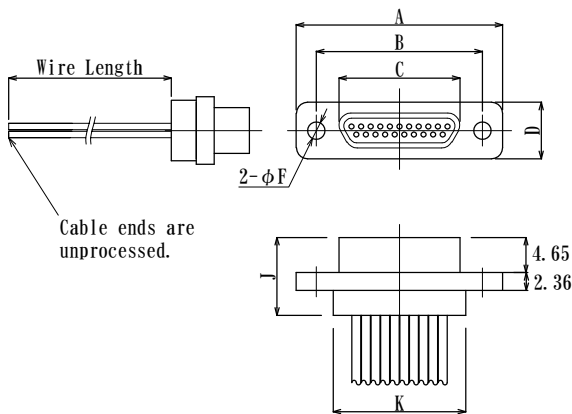
No. of Position

Wire
26 : AWG26
24 : AWG24

Wire Length *
1000 : 1000mm
500 : 500mm

Code
Please refer to Page 29A7, 29A8
for "Mount Hardware".

Wire Color
W : White
T : 10 Color
(Please refer to Page 29A5)



*Other length is also available. Please contact us.

No. of Position	A	B	C	Dmax	φF	Jmax	Kmax
9	19.9	14.4	8.5	7.8	2.3	10.6	10.2
15	23.8	18.2	12.3				14.0
21	27.6	22.0	16.1				18.0
25	30.0	24.5	18.6				20.3

mm

Receptacle

How to order

MDS□□R-W-□□L1000-W-□

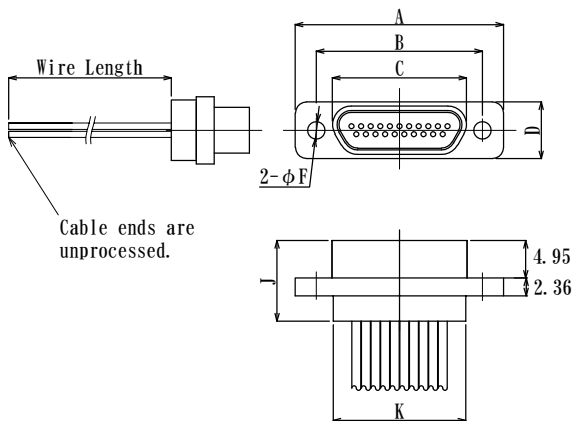
No. of Position

Wire
26 : AWG26
24 : AWG24

Wire Length *
1000 : 1000mm
500 : 500mm

Code
Please refer to Page 29A7, 29A8
for "Mount Hardware".

Wire Color
W : White
T : 10 Color
(Please refer to Page 29A5)

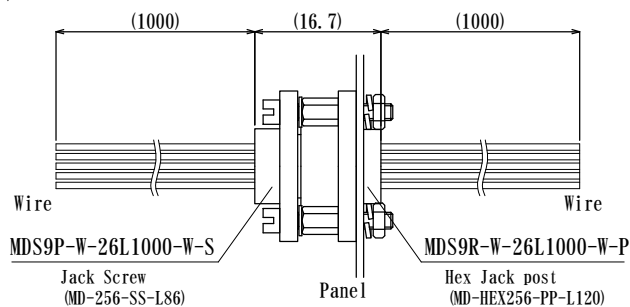


*Other length is also available. Please contact us.

No. of Position	A	B	C	Dmax	φF	Jmax	Kmax
9	19.9	14.4	10.2	7.8	2.3	10.9	10.2
15	23.8	18.2	14.0				14.0
21	27.6	22.0	17.8				18.0
25	30.0	24.5	20.4				20.3

mm

How to use
example)



Wire Color : 10 Color
repeating type

Micro-D Connector with Double Side Insulated Wire



With cable type
Wire Crimping type
Metal shell type

Connector Dimension Table

Plug							Receptacle						
No. of Position	mm						No. of Position	mm					
	A	B	C1	Dmax	ϕF	J1max		A	B	C2	Dmax	ϕF	J2max
9	19.9	14.4	8.5	7.8	2.3	10.6	9	19.9	14.4	10.2	7.8	2.3	10.9
15	23.8	18.2	12.3				15	23.8	18.2	14.0			
21	27.6	22.0	16.1				21	27.6	22.0	17.8			
25	30.0	24.5	18.6				25	30.0	24.5	20.4			

Plug to Plug
Receptacle to Receptacle

How to order

MDS□□□□-**W**-□□**L**□□□□-**W**-□-□

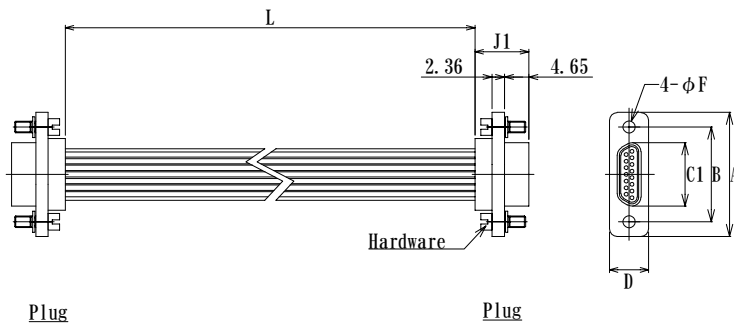
No. of Position ————
PP : Plug to Plug
RR : Receptacle to Receptacle

Wire
26 : AWG26
24 : AWG24

Wire Length (L) *1
1000 : 1000mm
500 : 500mm

Wire Color
W : White
T : 10 Color
(Please refer to Page 29A5)

Right Side *2
Left Side *2



*1 Other length is also available. Please contact us.
*2 Please refer to Page 29A7, 29A8 for "Mount Hardware"

Receptacle to Plug

How to order

MDS□□□□-**W**-□□**L**□□□□-**W**-□-□

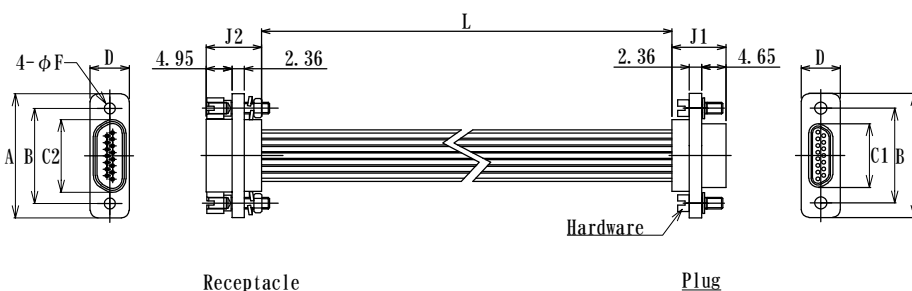
No. of Position ————
RP : Receptacle to Plug

Wire
26 : AWG26
24 : AWG24

Wire Length (L) *1
1000 : 1000mm
500 : 500mm

Wire Color
W : White
T : 10 Color
(Please refer to Page 29A5)

Right Side *2
Left Side *2



*1 Other length is also available. Please contact us.
*2 Please refer to Page 29A7, 29A8 for "Mount Hardware"



Micro-D connector with stamping Plug pin, Insulated Wire

Stamping Plug Contact type
With cable type
Wire Crimping type
Metal shell type

Made to order

Specification

Insulation Resistance : 5000MΩ min
Dielectric Withstanding Voltage : AC600Vrms (Sea level)
Current Rating : 1A
Contact Resistance : 20mΩ max
Low Signal Level Contact Resistance : 50mΩ max
Pitch : 1.27mm/0.050inch
Wire : AWG28~30
Temperature Range : -30°C ~ +100°C

How to order

MDSE□□P-W-□□L1000-W-□

No. of Position

Wire
28 : AWG28
30 : AWG30

Wire Length *
1000 : 1000mm
500 : 500mm

Code

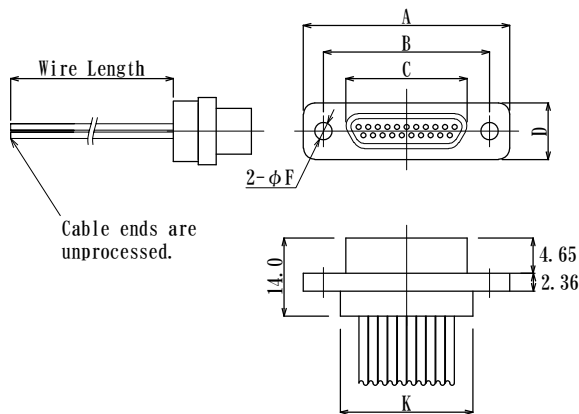
Please refer to page 29A7,
29A8 for "Mount Hardware".

Wire Color

W : White
T : 10 Color

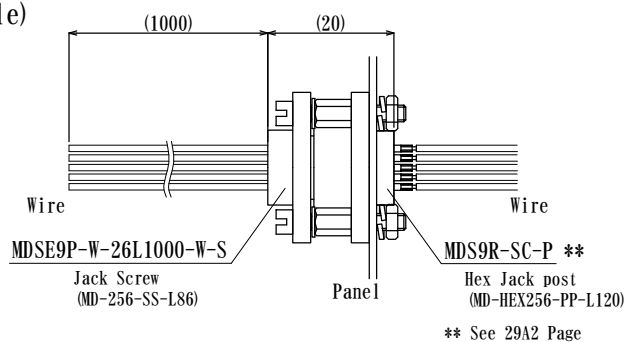
*Other length is also available.
Please contact us. (Please refer to table below.)

Plug



No. of Position	A	B	C	Dmax	φ F	Kmax
9	19.9	14.4	8.5	7.8	2.3	10.2
15	23.8	18.2	12.3			14.0
21	27.6	22.0	16.1			18.0
25	30.0	24.5	18.6			20.3

How to use example)

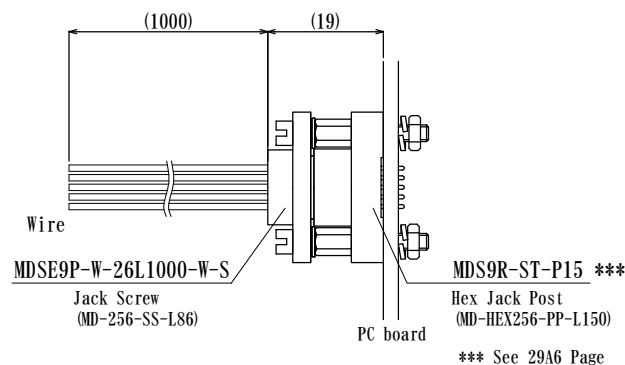


Wire 10 color code

数字	色 Color
1	Black
2	Brown
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Purple
9	Gray
0	White

Wire
ETFE
150°C max
600V

Other color is also available. Please contact us.

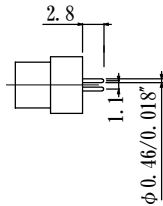
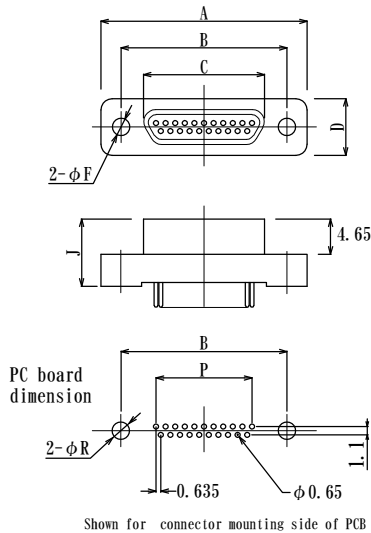


*** See 29A6 Page

Micro-D connector, PCB Vertical, Straight Thru Hole type

○Space saving type with 1.27mm/0.050" pitch PCB mount.

Plug



How to order

MDS□□P-ST-□

No. of Position Code

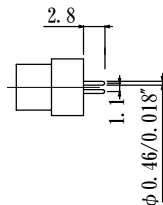
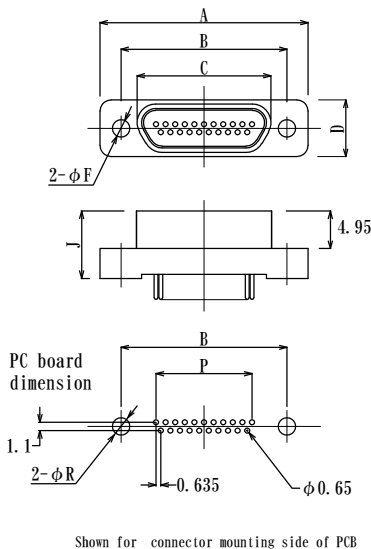
Please refer to Page 29A7 and 29A8 for "Mount Hardware".

No. of Position	A	B	C	Dmax	φF	Jmax	φR	P
9	19.9	14.4	8.5	7.8	2.3	9.2	2.3	0.635x8=5.08
15	23.8	18.2	12.3					0.635x14=8.89
21	27.6	22.0	16.1					0.635x20=12.70
25	30.0	24.5	18.6					0.635x24=15.24

Other No of Contacts is made-to-order.



Receptacle



How to Order

MDS□□R-ST-□

No. of Position Code

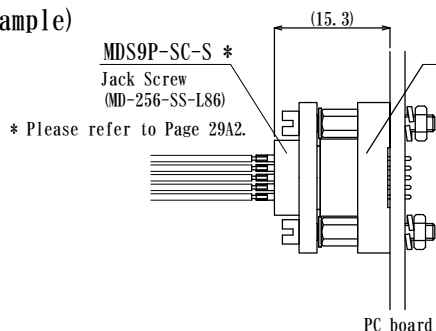
Please refer to Page 29A7 and 29A8 for "Mount Hardware".

No. of Position	A	B	C	Dmax	φF	Jmax	φR	P
9	19.9	14.4	10.2	7.8	2.3	9.2	2.3	0.635x8=5.08
15	23.8	18.2	14.0					0.635x14=8.89
21	27.6	22.0	17.8					0.635x20=12.70
25	30.0	24.5	20.4					0.635x24=15.24

Other No of Contacts is made-to-order.



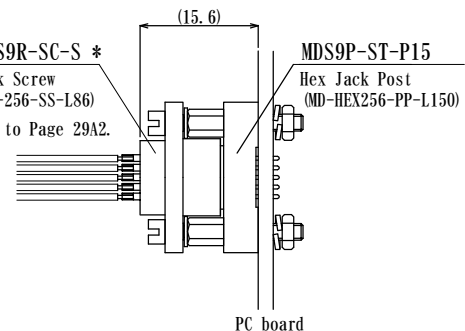
How to Use Example)



MDS9R-ST-P15
Hex Jack Post
(MD-HEX256-PP-L150)

MDS9R-SC-S *
Jack Screw
(MD-256-SS-L86)

* Please refer to Page 29A2.



Micro-D connector

Mount Hardware

mm

Type	Non	Hex Jack Post	Hex Jack Post	Jack Screw
Code	(blank)	P	P15	S
P/N	-	MD-HEX256-PP-L120-SET	MD-HEX256-PP-L150-SET	MD-256-SS-L86-SET

Type	Jack post, Rear panel mount	Jack post, Rear panel mount	Jack post, Rear panel mount
Code	RP16	RP24	RP40
P/N	MD-256-RP16-L12-SET	MD-256-RP24-L12-SET	MD-256-RP4-L12-SET

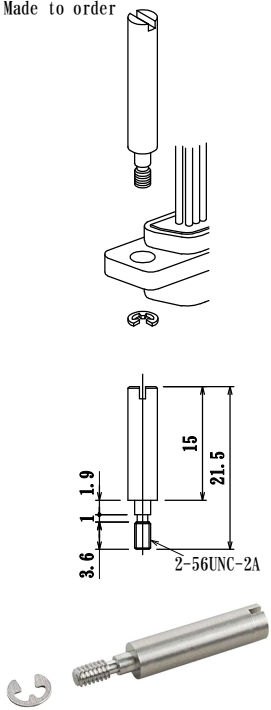
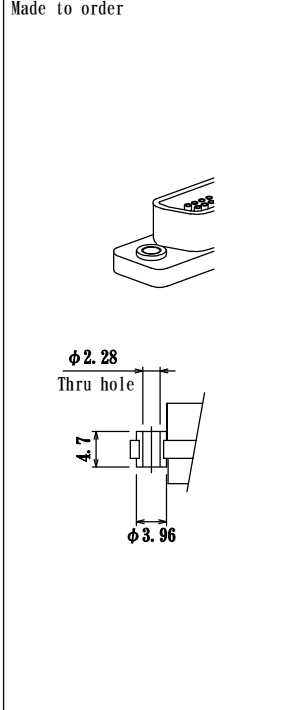
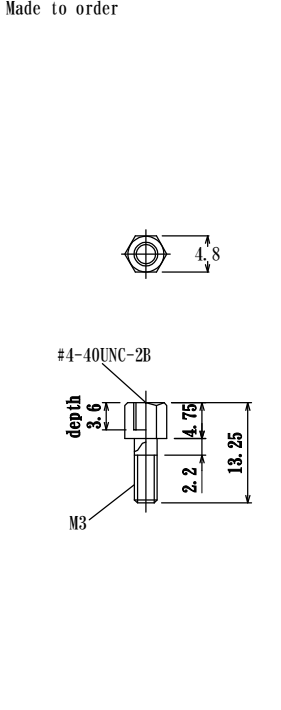
For the panel mounting method, please refer to page 29A10.

Base on the screws for 100 positions is #4-40 UNC, please contact us.

Micro-D connector

Mount Hardware

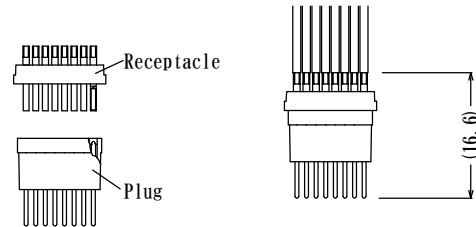
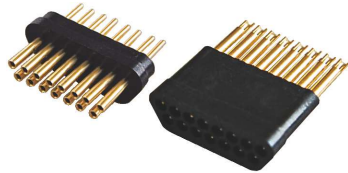
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Type	Long Jack Screw	Front Float	Hex Screw
Code	LSP	F	H4M3
P/N	MD-256-LSP-L223-SET	MD-HW-FF	MD-HEX440-PP-L1325
	<p>Made to order</p>  <p>3.6 1.9 1 21.5 15 2-56UNC-2A</p>	<p>Made to order</p>  <p>$\phi 2.28$ Thru hole 4.7 $\phi 3.96$</p>	<p>Made to order</p>  <p>4.8 #4-40UNC-2B depth 3.6 4.75 2.2 13.25 M3</p>

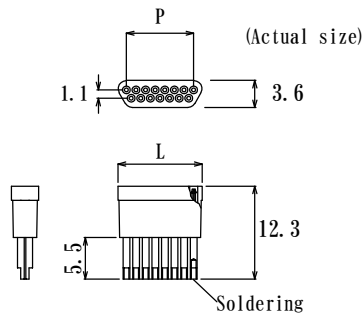
Base on the screws for 100 positions is #4-40 UNC, please contact us.

Micro-D connector, Sub assembly

Could be used for easy connection for prototyping and evaluation.
It is the subassembly excluding the shell.



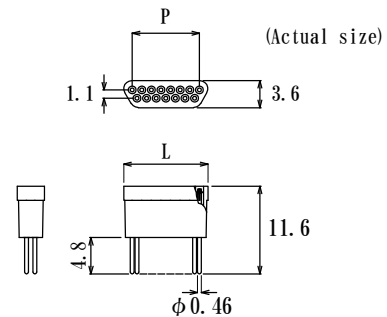
Plug Cable Solder Cup type



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P/N	No. of Position	L	P
MDS-SUB-9P-SC	9	7.36	0.635x8=5.08
MDS-SUB-15P-SC	15	11.17	0.635x14=8.89
MDS-SUB-21P-SC	21	14.98	0.635x20=12.70
MDS-SUB-25P-SC	25	17.52	0.635x24=15.24

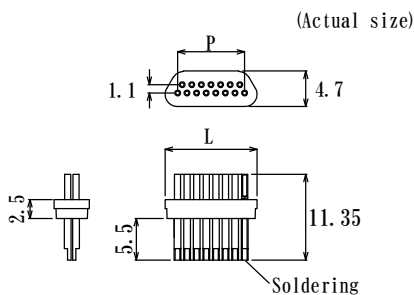
Plug Straight Through Hole type



mm

P/N	No. of Position	L	P
MDS-SUB-9P-SD	9	7.36	0.635x8=5.08
MDS-SUB-15P-SD	15	11.17	0.635x14=8.89
MDS-SUB-21P-SD	21	14.98	0.635x20=12.70
MDS-SUB-25P-SD	25	17.52	0.635x24=15.24

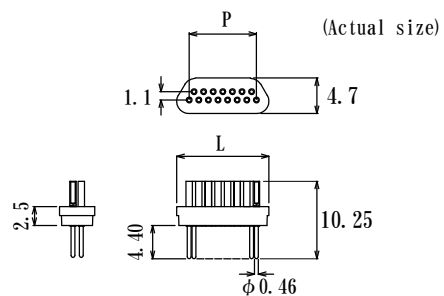
Receptacle Cable Solder Cup type



mm

P/N	No. of Position	L	P
MDS-SUB-9R-SC	9	8.56	0.635x8=5.08
MDS-SUB-15R-SC	15	12.37	0.635x14=8.89
MDS-SUB-21R-SC	21	16.00	0.635x20=12.70
MDS-SUB-25R-SC	25	18.54	0.635x24=15.24

Receptacle Straight Through Hole type



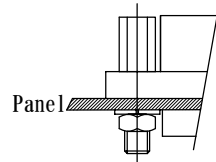
mm

P/N	No. of Position	L	P
MDS-SUB-9R-SD	9	8.56	0.635x8=5.08
MDS-SUB-15R-SD	15	12.37	0.635x14=8.89
MDS-SUB-21R-SD	21	16.00	0.635x20=12.70
MDS-SUB-25R-SD	25	18.54	0.635x24=15.24

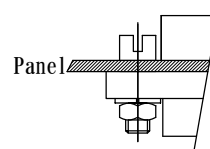
Micro-D connector

There are two methods for panel mounting as shown in the figure, and the panel machining dimensions are different.

Front Panel mount



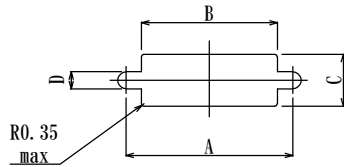
Rear Panel mount



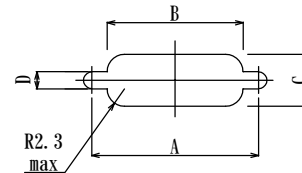
*For rear panel mounting, the jack post is non-standard.

Panel cut

Front Panel mount
9~100 (pin)



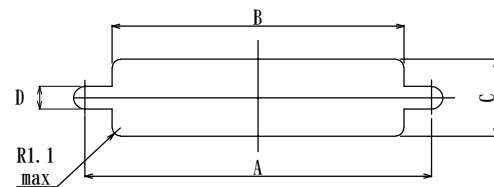
Rear Panel mount
9~69 (pin)



No. of Position	How to mount	A	B	C	D
		±0.05	±0.05	±0.05	+0.10 -0.00
9	Front	14.35	10.35	6.90	2.26
	Rear			6.50	3.15
15	Front	18.16	14.16	6.90	2.26
	Rear			6.50	3.15
21	Front	21.97	17.97	6.90	2.26
	Rear			6.50	3.15
25	Front	24.51	20.51	6.90	2.26
	Rear			6.50	3.15

mm

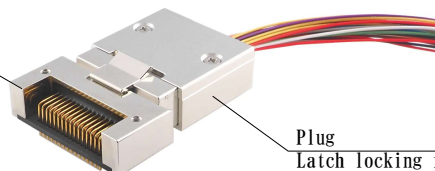
100 (pin)



We could support to the wide range of customer specifications. Please feel free to contact us.



Receptacle
Right angle



Plug
Latch locking feature