

R46 series high and low frequencies

hybrid connectors Brief introduction

- High and low frequencies signal integrated transmission, discrete configuration with excellent shielding performance
- Metallic shell with olive green cadmium plating
- Hyperboloid wire spring socket with high reliability
- Waterproof sealing
- EMI shielding
- Standard: Q/21EJ488



Main technical characteristics

—rated voltage: 24V
 —withstanding voltage: 1000V
 —Insulation resistance: Normal $\geq$ 1000M Ω , Heat damp $\geq$ 20M Ω

—Contact resistance and Rated current:

Contact diameter(mm)	Φ 0.8	Φ 1.5
Rated current (A)	2	10
Contact resistance (m Ω)	$\leq$ 12.5	$\leq$ 2.5
Rear end solder cup ID (mm)	Φ 0.9	Φ 1.8

—Operation temperature: -55 $^{\circ}$ C~+125 $^{\circ}$ C

—RH: 95% at 40 $^{\circ}$ C

—Coaxial contact characteristic impedance: 50 Ω

—Coaxial contact operation frequency range: DC~2GHz

—Coaxial contact VSWR: 1.3

—vibration: 10~2000Hz, acceleration 147m/s²

—shock: acceleration 490m/s²

—waterproof sealing: water depth of 1 meter for 0.5h

—shielding effectiveness: better than -60dB

—durability: 500 cycles

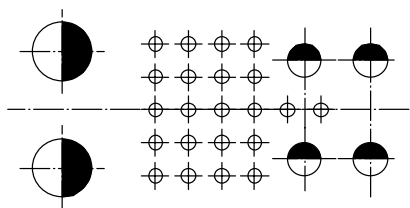
Designation

No	Classification	Contents	Mark
1	Series	R46 series high and low frequencies hybrid connectors	R46
2	Types of termination for low frequency contacts	PCB soldering	B
		Wire soldering	H
3	Number of low frequency contacts	27, 68.....	Mark the number
4	High frequency contacts	G	G
5	Number of high frequency contacts	2,4.....	Mark the number
6	Plug, Receptacle, Adapting receptacle types	Plug	T
		Receptacle	Z
		Adapting receptacle	LZ
7	Plug No.	Plug1, Plug2, Plug3	Mark the

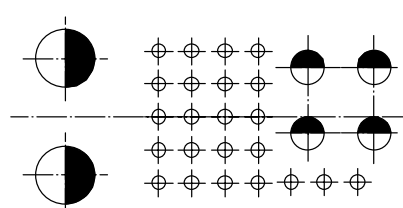
			number
8	Configuration type	Plug with sockets	K
		Receptacle with pins	J
		Adapting receptacle (both ends) with pins	Blank
9	Coaxial contact type	Coaxial contact type (do not mark the type emerging firstly)	A001, A002 etc

Insert arrangement

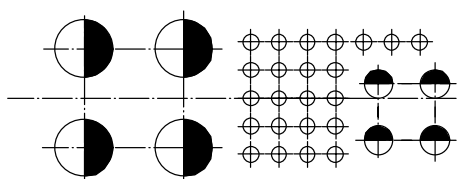
Contact types include low frequency contact and coaxial contact. Low frequency contact includes $\Phi 1.5$ and $\Phi 0.8$ two sizes. Interface for coaxial contact is D4 standard interface. The other end could be adaptor or terminated cable. Detailed insert arrangements are below:



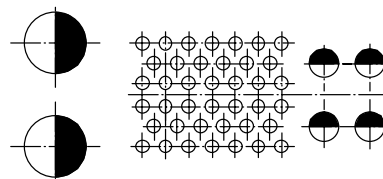
22- $\Phi 0.8$, 4- $\Phi 1.5$, 2-coaxial
(See the product P4~P6)



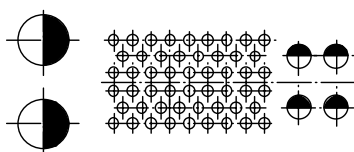
23- $\Phi 0.8$, 4- $\Phi 1.5$, 2-coaxial
(See the product P10~P12)



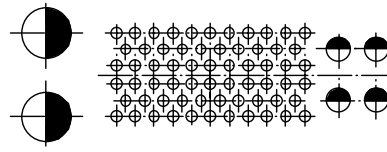
23- $\Phi 0.8$, 4- $\Phi 1.5$, 4-coaxial
(See the product P13~P15)



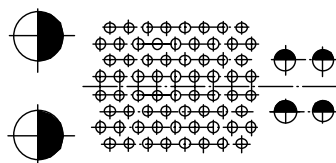
40- $\Phi 0.8$, 4- $\Phi 1.5$, 2-coaxial
(See the product P27)



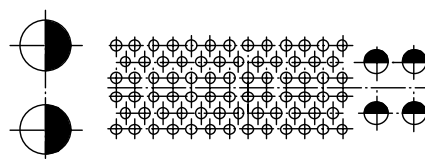
52- $\Phi 0.8$, 4- $\Phi 1.5$, 2-coaxial
(See the product P23)



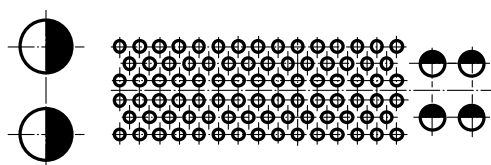
64- $\Phi 0.8$, 4- $\Phi 1.5$, 2-coaxial (See the product P13~P18)



68- $\Phi 0.8$, 4- $\Phi 1.5$, 2-Coaxial (See the product P18~P20)

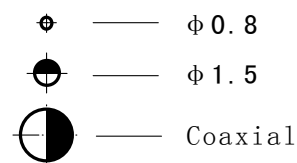


76- $\Phi 0.8$, 4- $\Phi 1.5$, 2-Coaxial (See the product P23)



88- $\phi 0.8$, 4- $\phi 1.5$, 2-Coaxial
(See the product P21~P22)

Contact definition



Product matching table

In R46 series, there are some products including plug and receptacle two parts. Other products consist of two PCB plugs and one adapting receptacle. In this kind of product, the two PCB plugs are soldered on the PCB directly and then mate plug or receptacle. Detailed product compositions are listed in the table below:

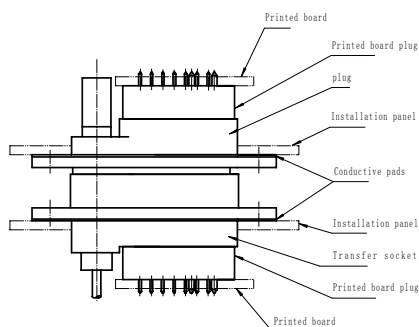
Connector P/N	PCB plug P/N	Plug P/N	Receptacle or Adapting receptacle P/N	PCB plug P/N
R46B26G2T ¹ K/Z1K ^J	R46B26T2K	R46B26G2T1K	R46B26G2Z1J	R46B26Z1K
R46H26G2ZJ/TK-D1	None	R46H26G2TK-D1	R46H26G2ZJ	None
R46H26G2ZJ/TK-D2	None	R46H26G2TK-D2	R46H26G2ZJ	None
R46H26G2ZJ/TK-D3	None	R46H26G2TK-D3	R46H26G2ZJ	None
R46H26G2ZJ/TK-D4	None	R46H26G2TK-D4	R46H26G2ZJ	None
R46B27G2ZJ/TK	R46B27T2K	R46B27G2TK	R46B27G2ZJ	R46B27T3K
R46H27G2ZJ/TK	None	R46H27G2TK	R46H27G2ZJ	None
R46B27G4LZ/B27G4T1K. B27T3 ² K	R46B27T2K	R46B27G4T1K	R46B27G4LZ	R46B27T3K
R46H27G4ZJ/H27G4T1K	None	R46H27G4T1K	R46H27G4ZJ	None
R46B44G2LZ/B44G2T1K. B44T3 ² K	R46B44T3K	R46B44G2T1K	R46B44G2LZ	R46B44T2K
R46B56G2LZ/B56G2T1K. B56T3 ² K	R46B56T3K	R46B56G2T1K	R46B56G2LZ	R46B56T2K
R46B68G2LZ/B68G2T1K. B68T3 ² K	R46B68T3K	R46B68G2T1K	R46B68G2LZ	R46B68T2K
R46B68G2LZ/B68G2T1K. B68T ² ₃₋₀₁ K	R46B68T3K-01	R46B68G2T1K	R46B68G2LZ	R46B68T2K
R46B68G2LZ-01/ BW68G2T1K	None	R46BW68G2T1K	R46B68G2LZ-01	None
R46B68G2LZ-02/ B68G2T1K-02	None	R46B68G2T1K-02	R46B68G2LZ-02	None
R46B68G2LZ-03/B68G2T1K-03-D1	None	R46B68G2T1K-03-D1	R46B68G2LZ-03	None
R46B68G2LZ-03/B68G2T1K-03-D2	None	R46B68G2T1K-03-D2	R46B68G2LZ-03	None
R46B68G2LZ/H68G2T1K. B68T2K	None	R46H68G2T1K	R46B68G2LZ	R46B68T2K
R46B72G2LZ/B72G2T1K. B68T ² ₃ K	R46B72T3K	R46B72G2T1K	R46B72G2LZ	R46B72T2K
R46B72G2LZ-01/B72G2T1K. B72T ² ₃ K	R46B72T3K	R46B72G2T1K	R46B72G2LZ-01	R46B72T2K
R46B72G2LZ-02/B72G2T1K. B72T ² ₃ K	R46B72T3K	R46B72G2T1K	R46B72G2LZ-02	R46B72T2K
R46B72G2LZ-03/B72G2T1K. B72T ² ₃ K	R46B72T3K	R46B72G2T1K	R46B72G2LZ-03	R46B72T2K
R46B72G2LZ/B72G2T1K-01. B72T ² ₃	R46B72G2T1K-01	R46B72T3K	R46B72G2LZ	R46B72T2K

K				
R46B80G2LZ/B80G2T1K. B80T3 ² K	R46B80T3K	R46B80G2T1K	R46B80G2LZ	R46B80T2K
R46B92G2LZ/B92G2T1K. B92T3 ² K	R46B92T3K	R46B92G2T1K	R46B92G2LZ	R46B92T2K

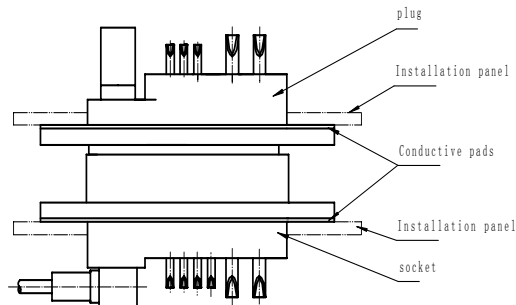
Note: Receptacle with PCB plug is an adapting receptacle.

[Product mounting example]

Four-piece connector mounting example:

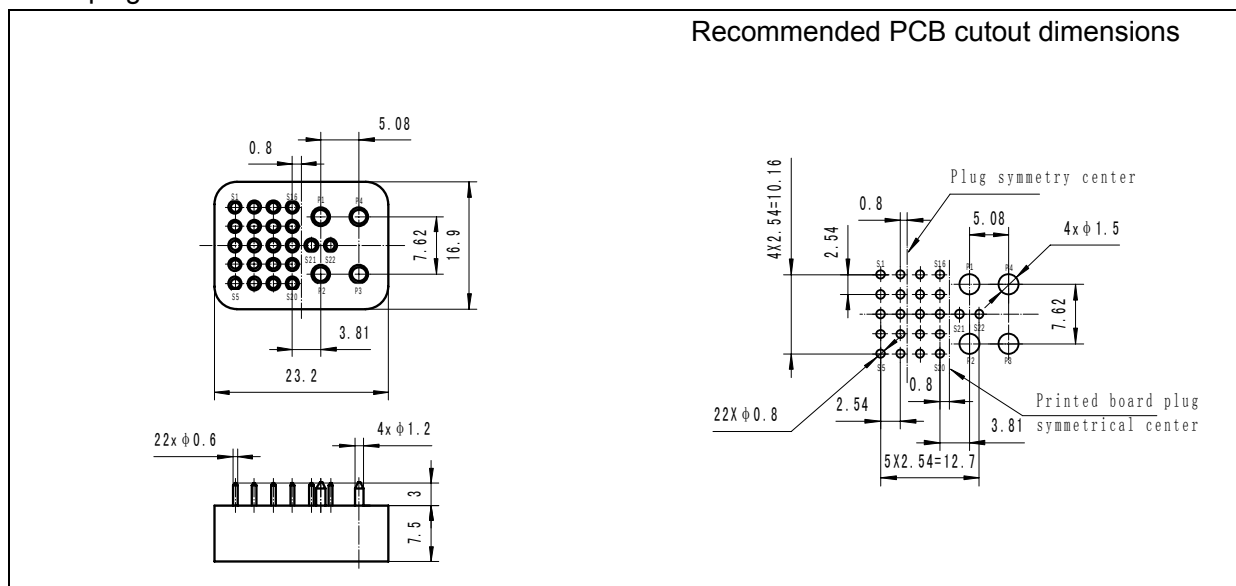


Two-piece connector mounting example:



Dimensions

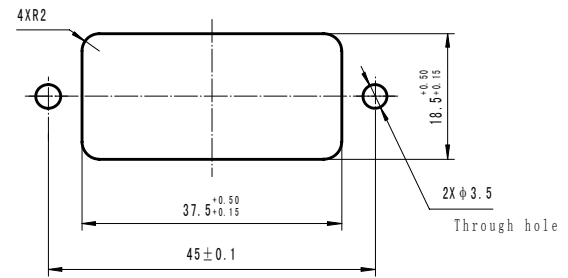
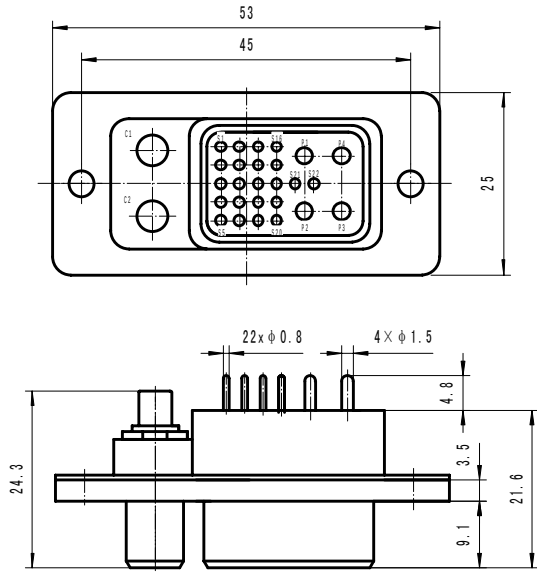
PCB plug R46B26T2K



Plug R46B26G2T1K

Product inside is loaded by coaxial contact P/N D4/MCX-JK.

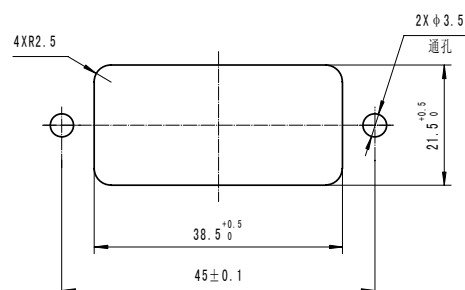
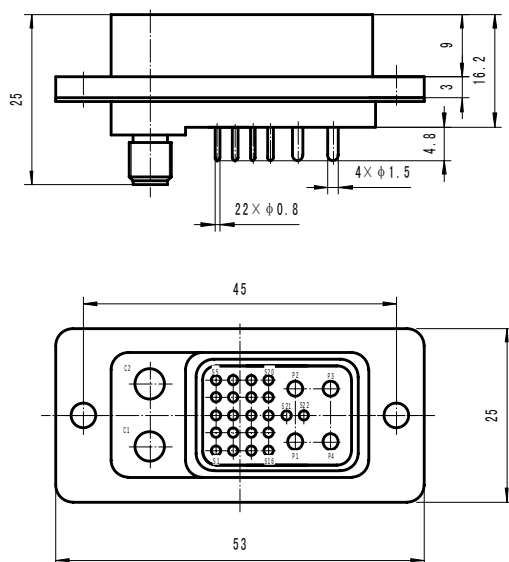
Recommended panel cutout dimensions



Adapting receptacle R46B26G2Z1J

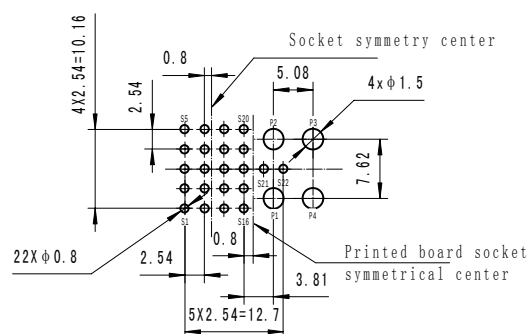
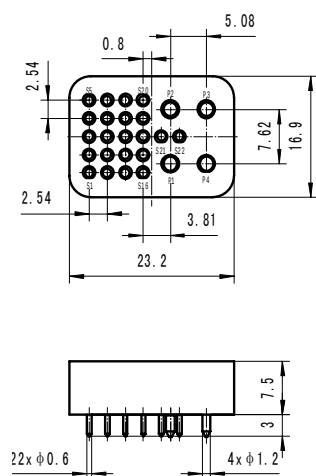
Product inside is loaded by coaxial contact D4/SSMA-KK

Recommended panel cutout dimensions

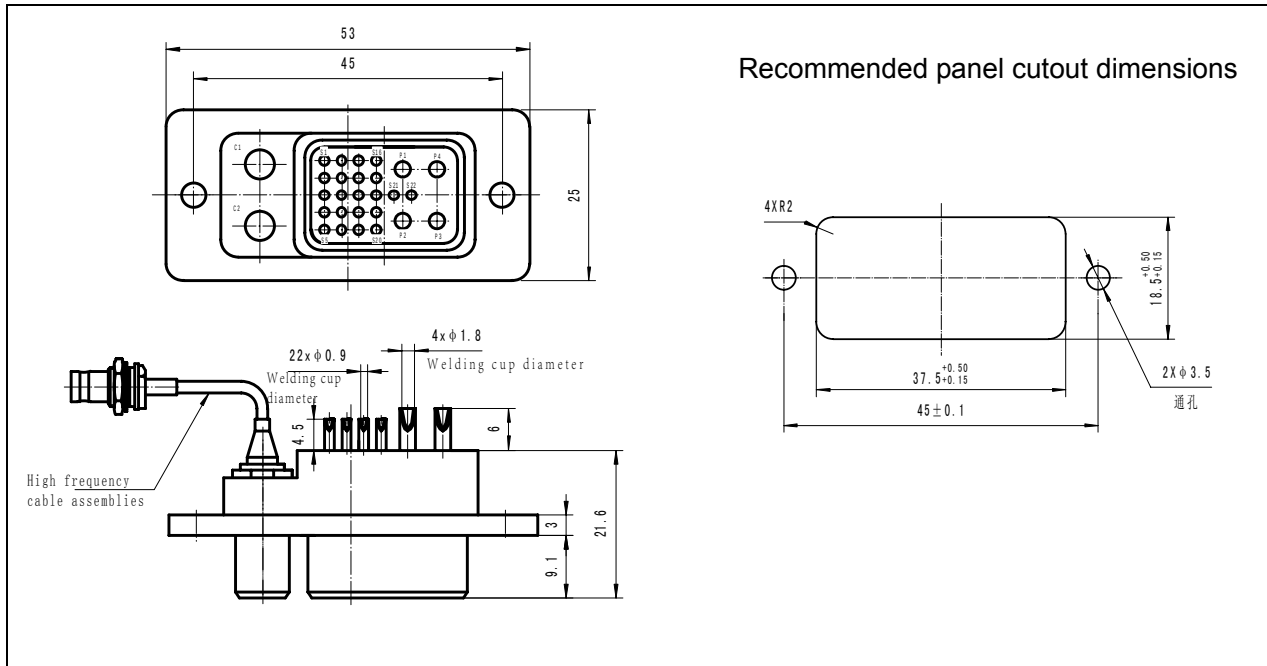


PCB Receptacle R46B26Z1K

Recommended PCB cutout dimensions



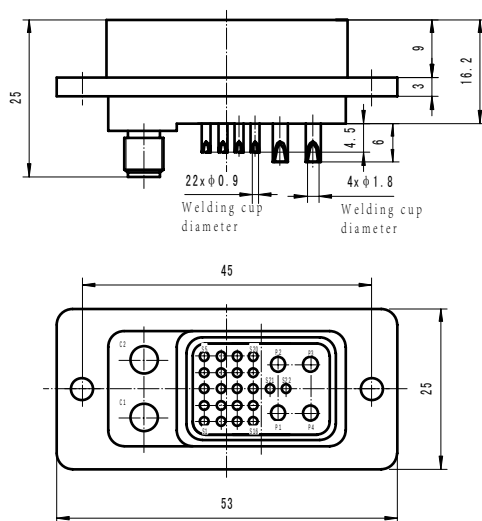
Plug R46H26G2TK-D1, R46H26G2TK-D2, R46H26G2TK-D3, R46H26G2TK-D4 Differences of these 4 products are the loaded coaxial cable assemblies. They have one BNC-SMA(S)-KYK and one BNC-SMA(S)-KFK adaptor.



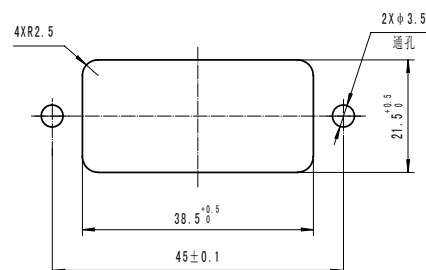
Plug P/N	Coaxial cable assembly P/N	Assembling cavity	Amount
R46H26G2TK-D1	D4-J3B/SMA-J3-600	C1	1
	D4-J3B/SMA-JW3-120	C2	1
R46H26G2TK-D2	D4-J3B/BNC (S) -KY3-1-570	C1	1
	D4-J3B/BNC (S) -KY3-1-450	C2	1
R46H26G2TK-D3	D4-J3B/SMA (S) -J3-600	C1	1
	D4-J3B/BNC (S) -KY3-1-100	C2	1
R46H26G2TK-D4	D4-J3B/MCX-JW3-200	C1	1

Receptacle R46H26G2ZJ

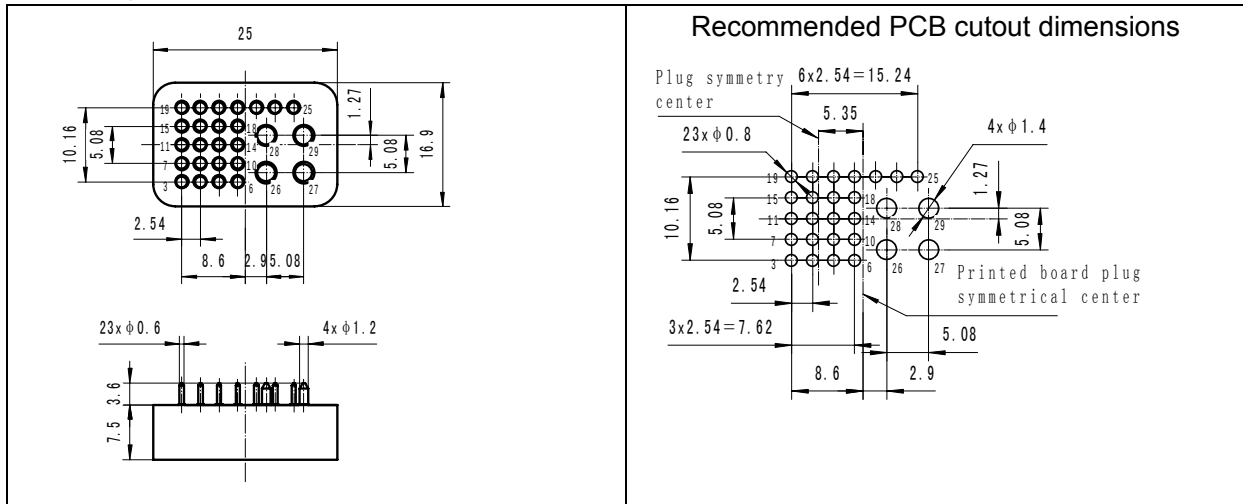
Product inside is loaded by coaxial contact P/ND4/SSMA-KK



Recommended panel cutout dimensions



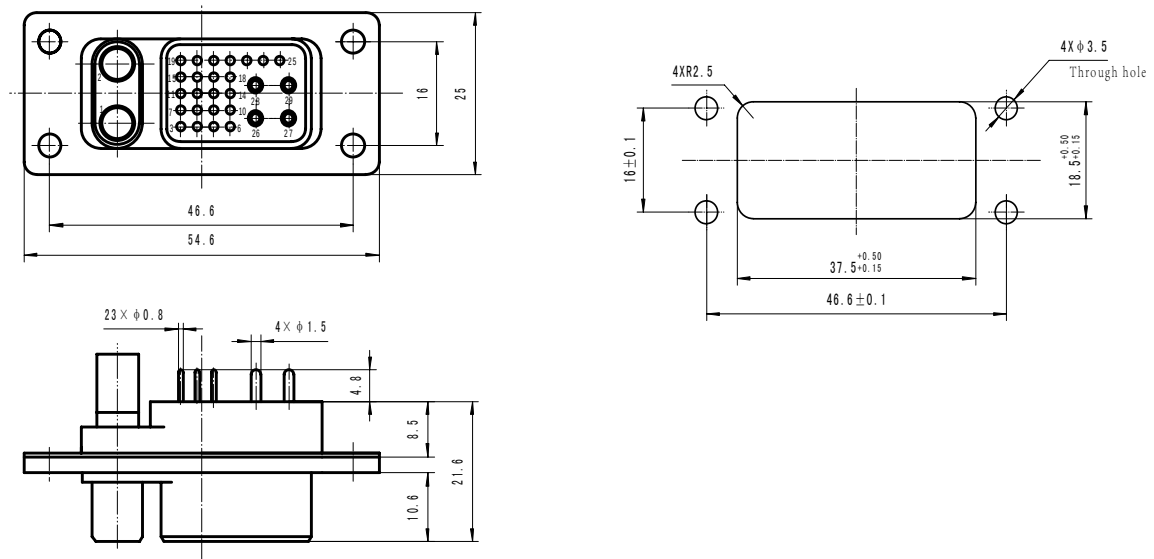
PCB plug R46B27T2K



Plug R46B27G2TK

Product inside is loaded by coaxial contact P/N D4-JJ-1

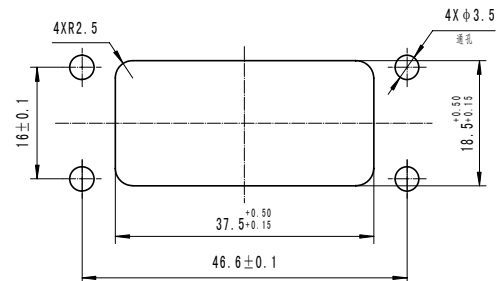
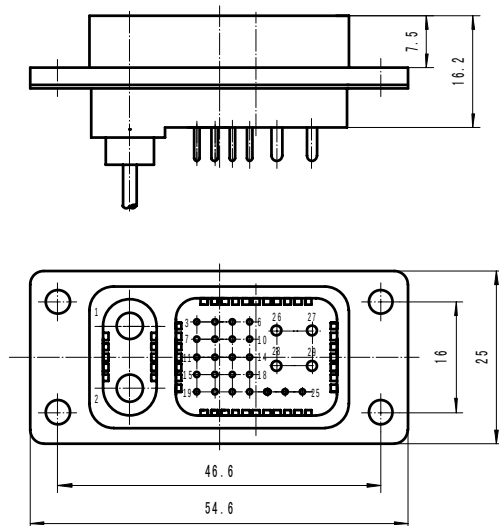
Recommended panel cutout dimensions



Adapting receptacle R46B27G2ZJ

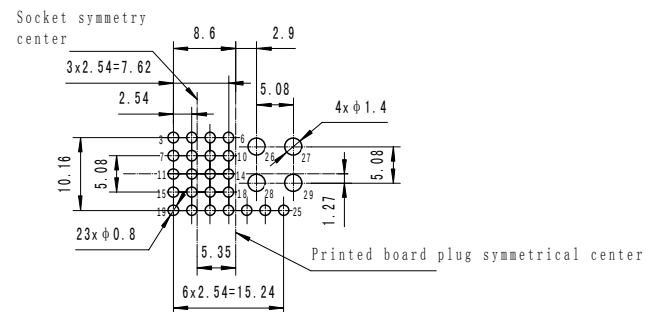
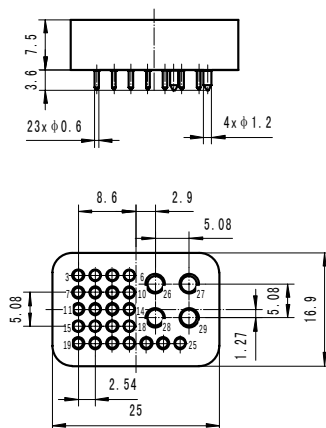
Product inside is loaded by coaxial cable assembly D4-K2-2-500

Recommended panel cutout dimensions



PCB plug R46B27T3K

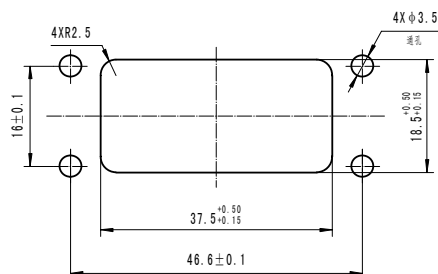
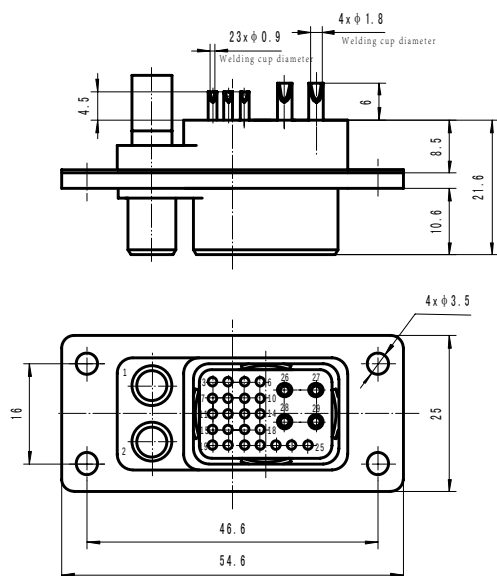
Recommended PCB cutout dimensions



Plug R46H27G2TK

Product inside is loaded by coaxial contact D4-JJ-1

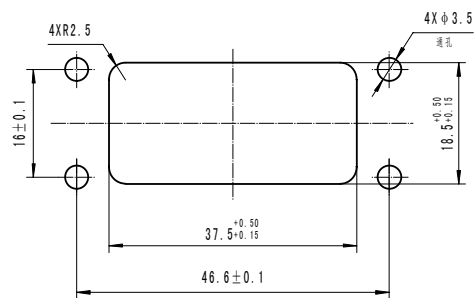
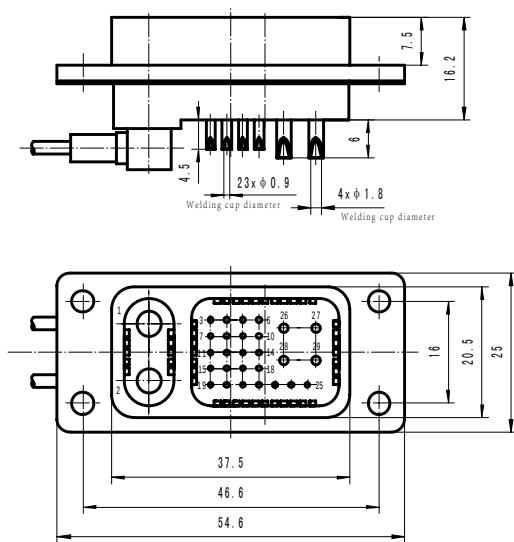
Recommended panel cutout dimensions



Receptacle R46H27G2ZJ

Product inside is loaded by coaxial cable assembly D4-KW5-3-500

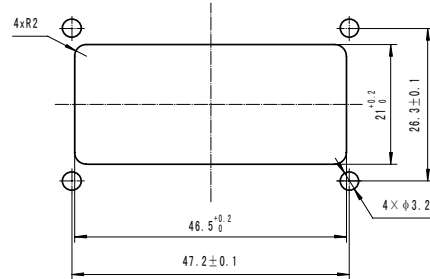
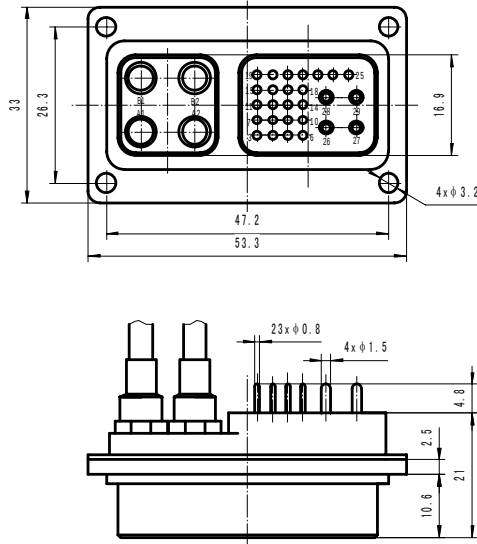
Recommended panel cutout dimensions



Plug R46B27G4T1K

Product inside is loaded by coaxial cable assembly D4-J5-1-600

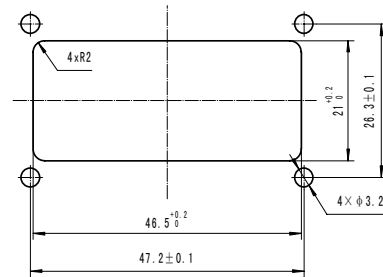
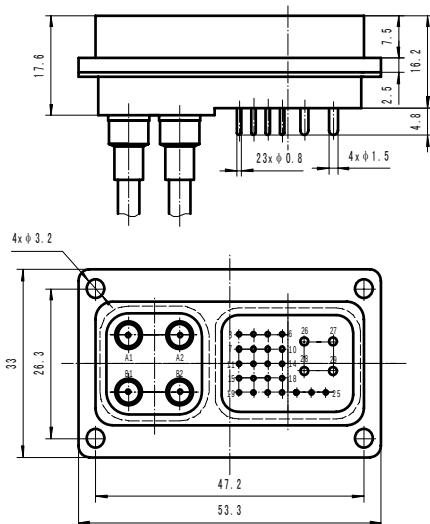
Recommended panel cutout dimensions



Adapting receptacle R46B27G4LZ

Product inside is loaded by coaxial cable assembly D4-K5-1-600

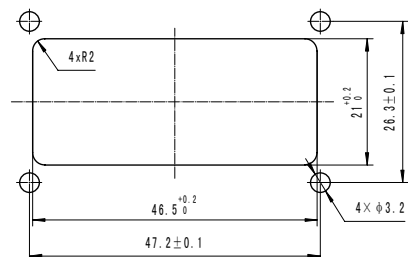
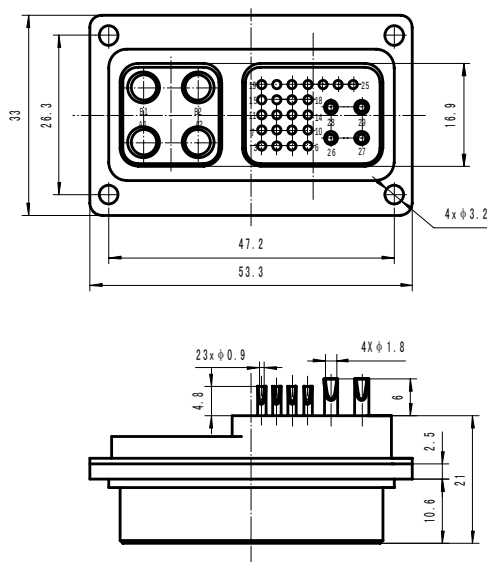
Recommended panel cutout dimensions



Plug R46H27G4T1K

Product inside is without coaxial contact. Can choose separately ordered D4-J5-1

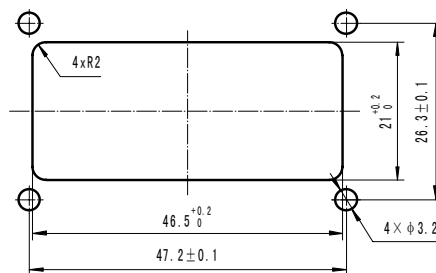
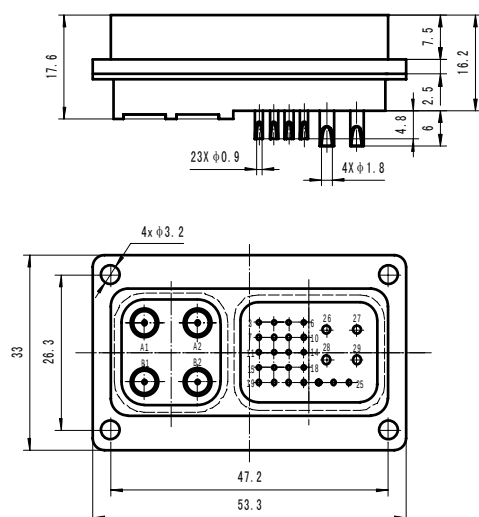
Recommended panel cutout dimensions



Adapting receptacle R46H27G4LZ

Product inside is without coaxial contact. Can choose separately ordered D4-K5-1

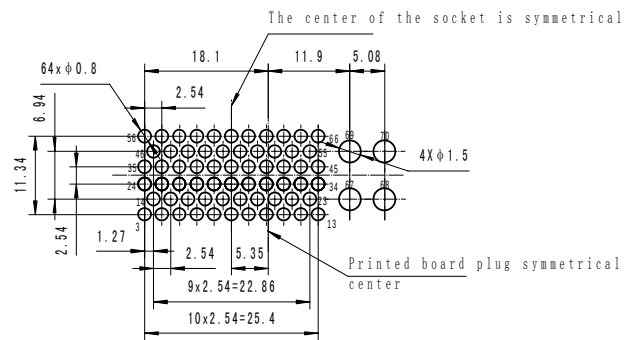
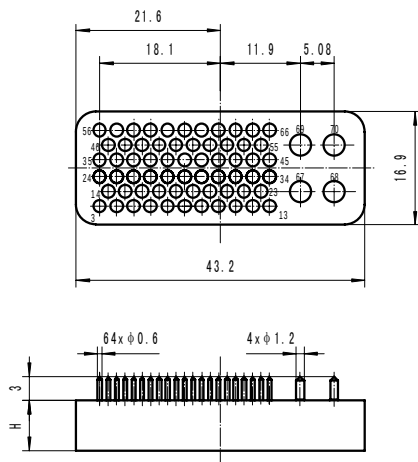
Recommended panel cutout dimensions



PCB plug R46B68T3K、R46B68T3K-01

R46B68T3K height H=7.5, R46B68T3K-01 height H=13, other dimensions are same

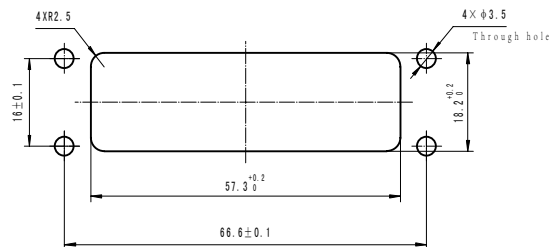
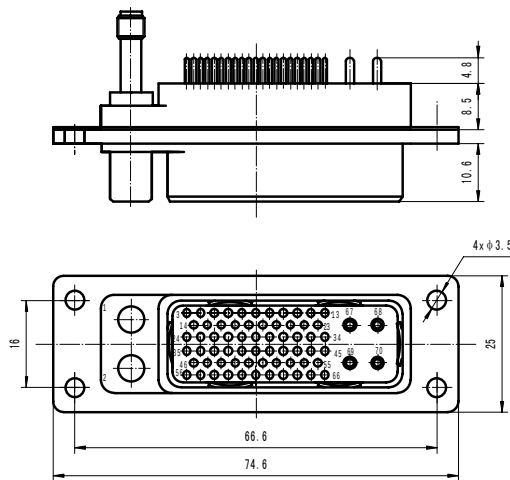
Recommended PCB cutout dimensions



Plug R46B68G2T1K

Only #2 cavity inside the product is loaded by coaxial contact D4-/SSMA-JK-2 and matching SSMA-JW5

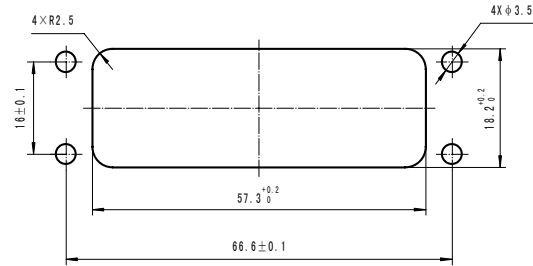
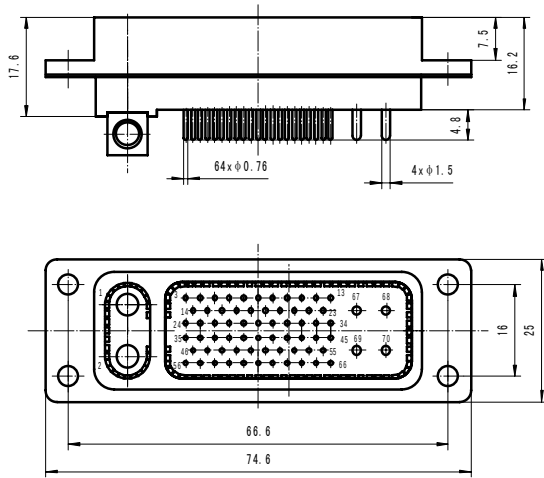
Recommended panel cutout dimensions



Adapting receptacle R46B68G2LZ

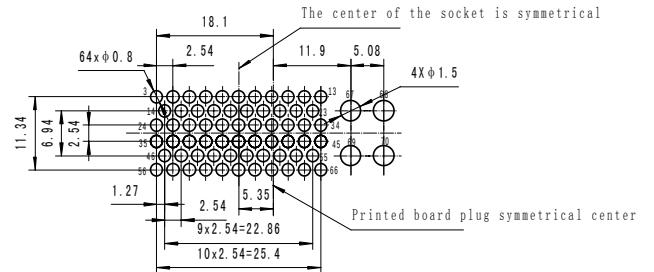
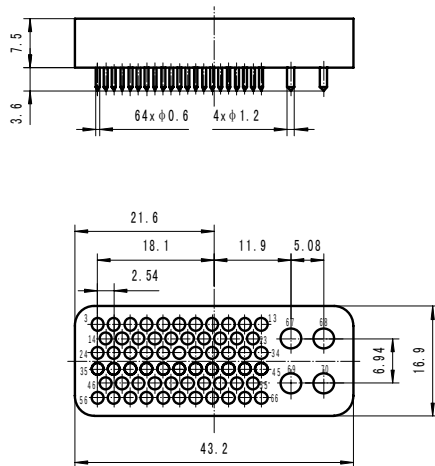
Only #2 cavity inside the product is loaded by coaxial cable assembly D4-KW5-3-500

Recommended panel cutout dimensions



PCB plug R46B68T2K

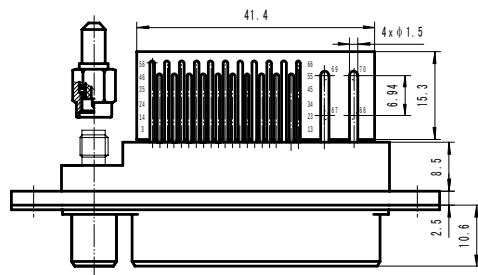
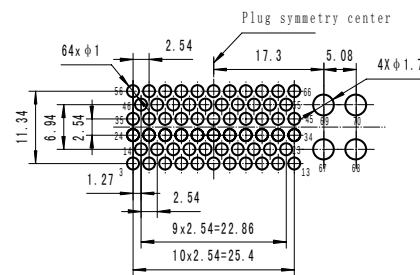
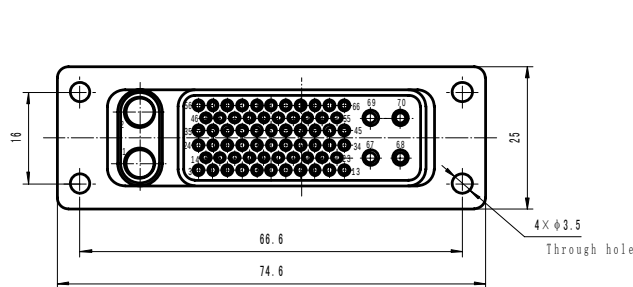
Recommended PCB cutout dimensions



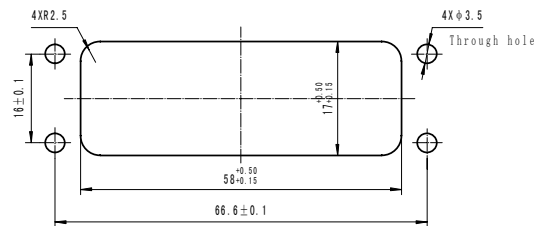
Plug R46BW68G2T1K

Product inside is loaded by coaxial contact D4/SSMA-JK-1, matching coaxial contact SSMA-J3

Recommended PCB cutout dimensions



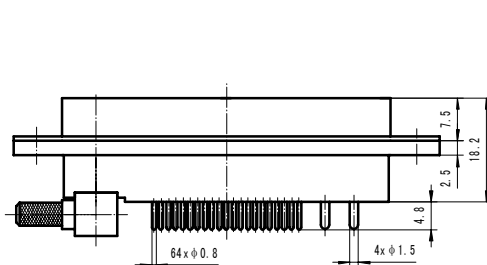
Recommended panel cutout dimensions



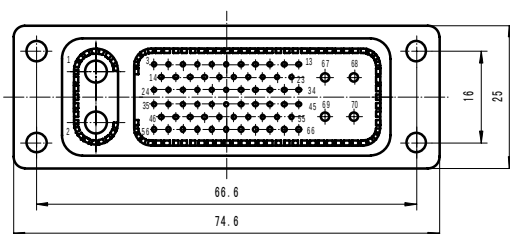
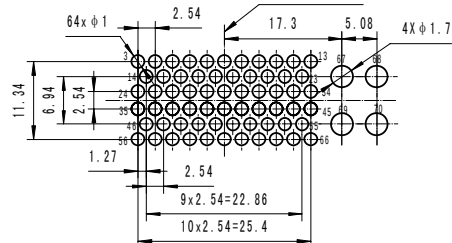
Adapting receptacle R46B68G2LZ-01

Product inside is loaded by high frequency cable assembly D4-KW3-1-500

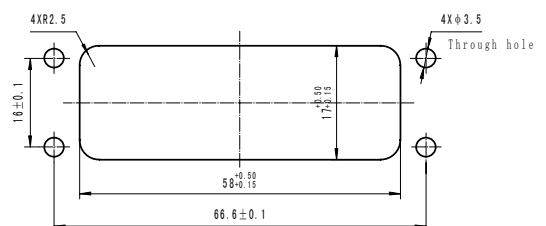
Recommended PCB cutout dimensions



The center of the socket is symmetrical



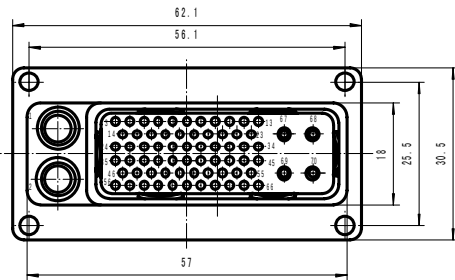
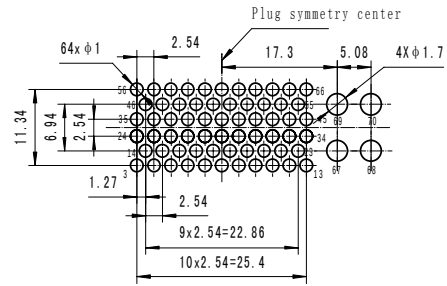
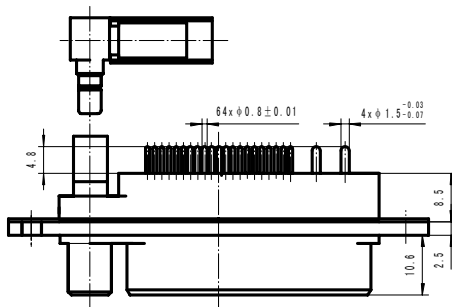
Recommended panel cutout dimensions



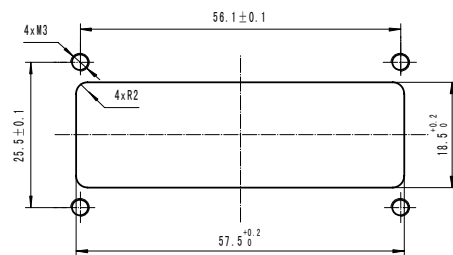
Plug R46B68G2T1K-02 (Electroless nickel plated shell)

Product inside is loaded by coaxial contact D4-JJ-1, matching coaxial contact D4-KW5-3

Recommended PCB cutout dimensions



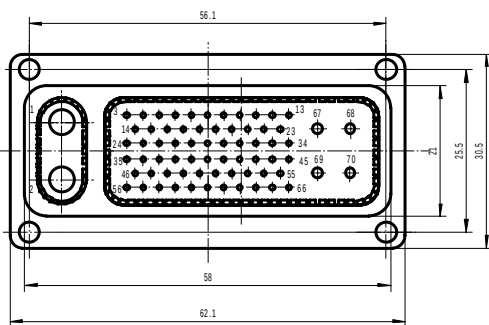
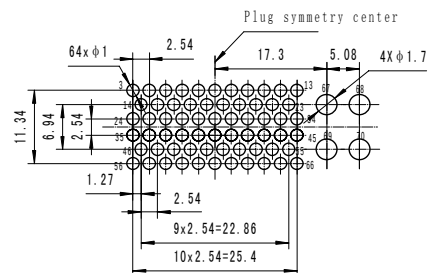
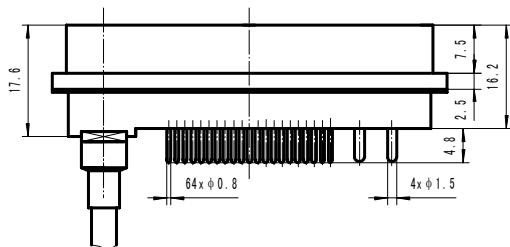
Recommended panel cutout dimensions



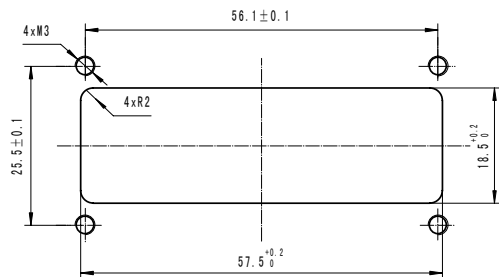
Receptacle R46B68G2LZ-02 (Electroless nickel plated shell) Product

inside is loaded by coaxial cable assembly D4-K3-1/SSMA-JW3-370

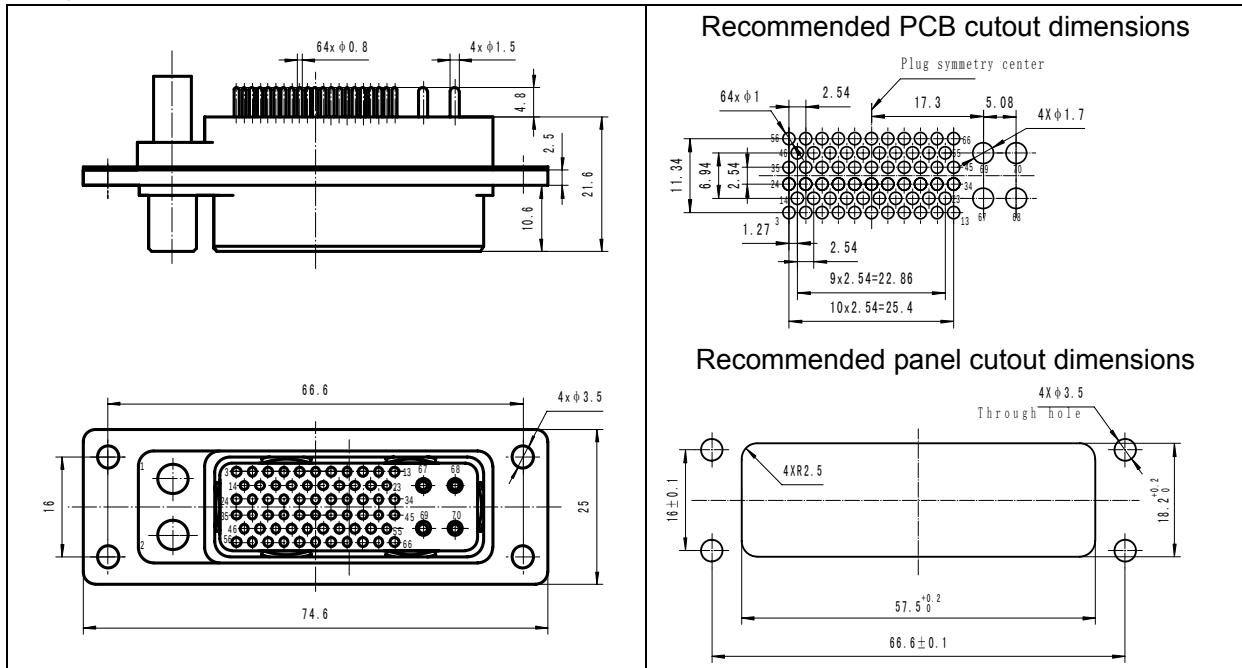
Recommended PCB cutout dimensions



Recommended panel cutout dimensions



Plug R46B68G2T1K-03-D1, R46B68G2T1K-03-D2

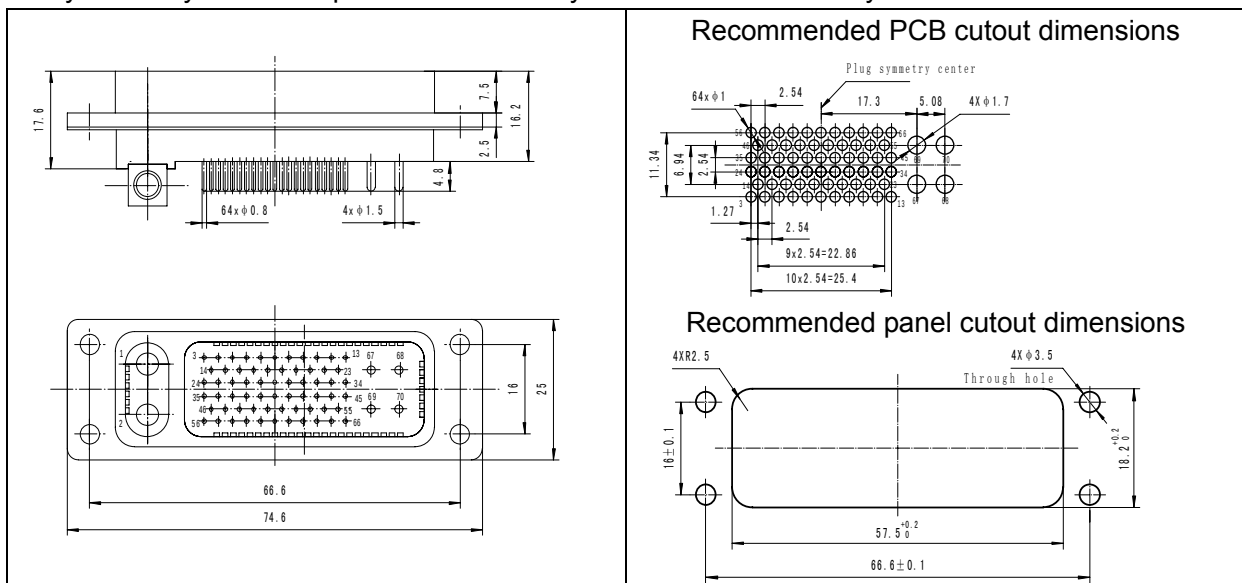


Only #2 cavity inside the product is loaded by coaxial contact P/N and matching coaxial cable assembly P/N in the table below:

Plug P/N	Coaxial contact P/N	Amount	Matching coaxial cable assembly (ordered separately)
R46B68G2T1K-03-D1	D4-JJ-1	1	D4-KWB3-1/N(s)-KYB3-430
			D4-KWB3-1/SMA-JB3-275
R46B68G2T1K-03-D2	D4/SMA(S)-JK	1	SMA-JWB3/N(s)-KYB3-430
			SMA-JWB3/SMA-JB3-275

Receptacle R46B68G2LZ-03

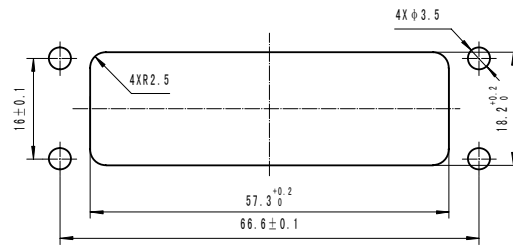
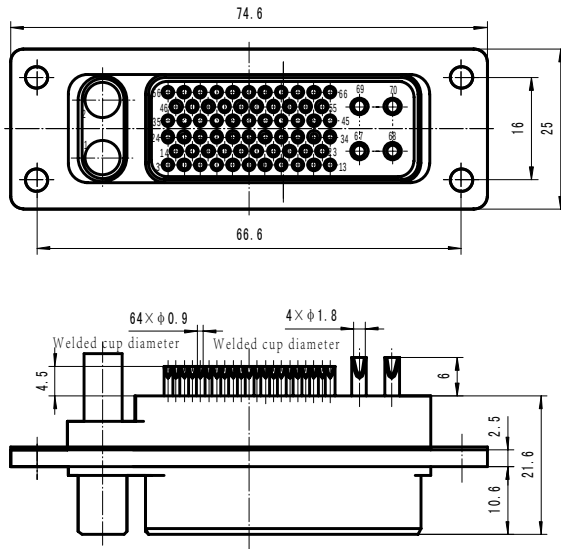
Only #2 cavity inside the product is loaded by coaxial cable assembly D4-KW5-3/SMA-JW5-235



Plug R46H68G2T1K

Only #2 cavity inside the product is loaded by coaxial contact D4-JJ-1, use D4-KW5-4 for matching

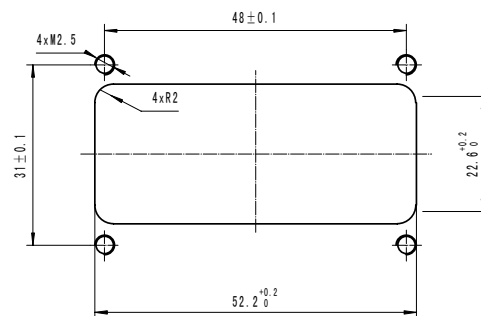
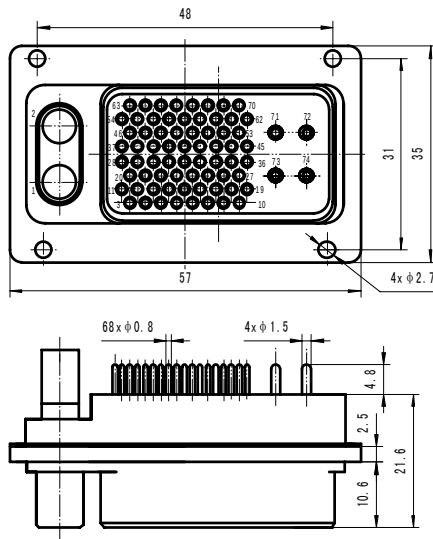
Recommended panel cutout dimensions



Plug R46B72G2T1K-01

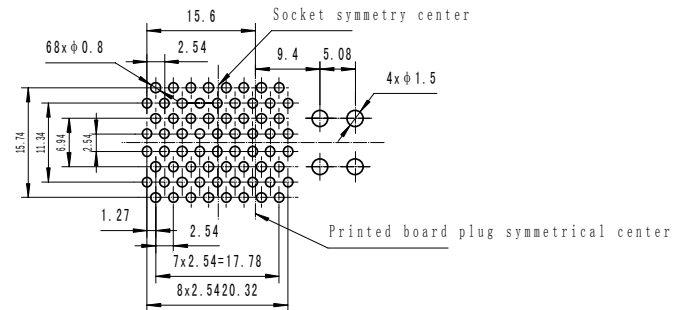
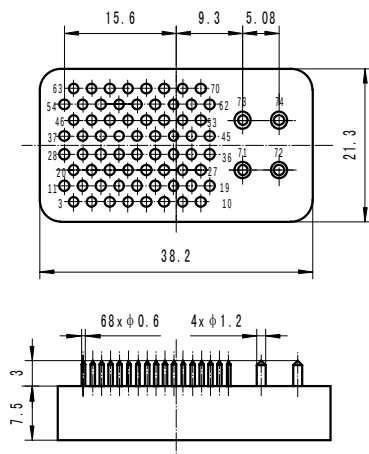
Product inside is loaded by coaxial cable assembly part number of D4-J2-500

Recommended panel cutout dimensions



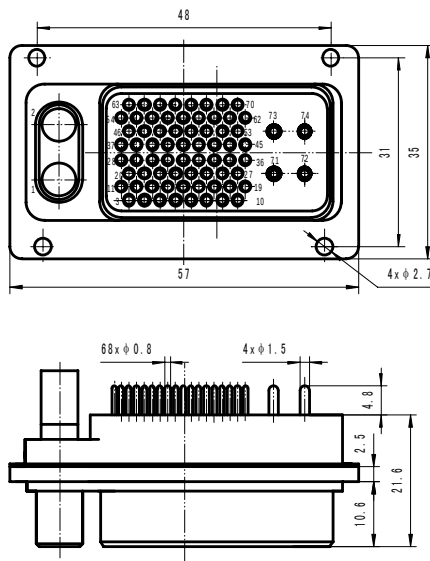
PCB plug R46B72T3K

Recommended PCB cutout dimensions

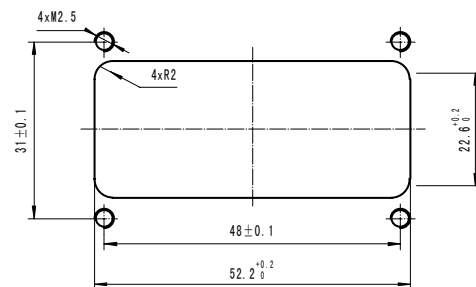


Plug R46B72G2T1K

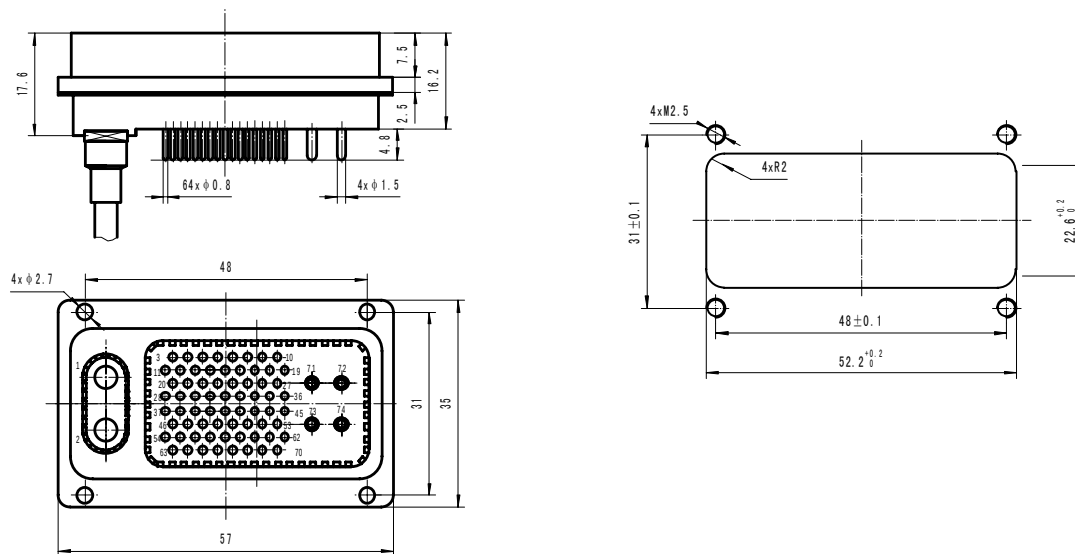
Only #2 cavity inside the product is loaded by coaxial contact D4-JJ-1, use D4-KW5-4 for matching



Recommended panel cutout dimensions



Adapting receptacle R46B72G2LZ, R46B72G2LZ-01, R46B72G2LZ-02, R46B72G2LZ-03
Recommended panel cutout dimensions

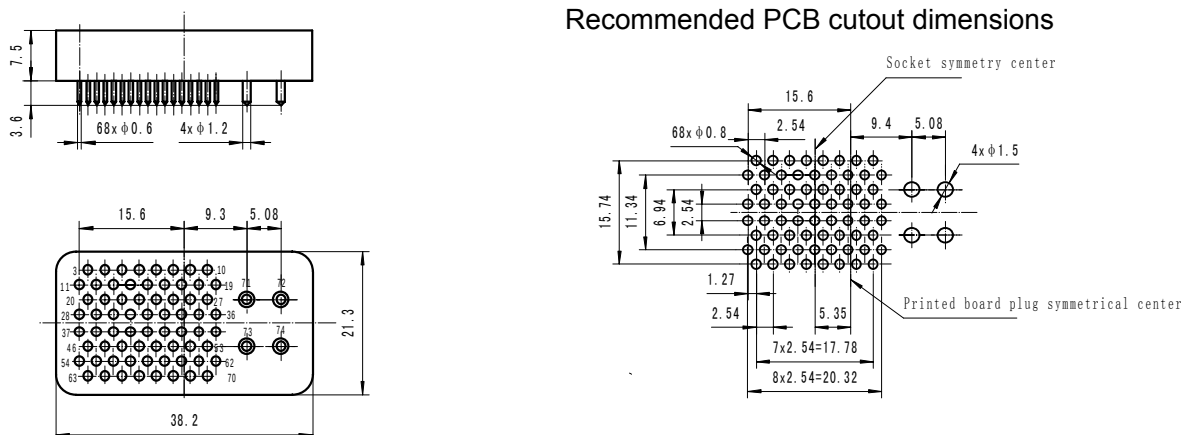


Part number for product inside loaded by coaxial contacts

Receptacle P/N	Coaxial contact P/N	Amount	Cavity
R46B72G2LZ	D4-K2-1/SSMB-JW2-500	2	1, 2
R46B72G2LZ-01	D4-K3-1/SSMA-JW3-370	1	2
R46B72G2LZ-02	D4-K3-1/MCX-KW3-295	1	2
R46B72G2LZ-03	D4/MCX-KK	1	2

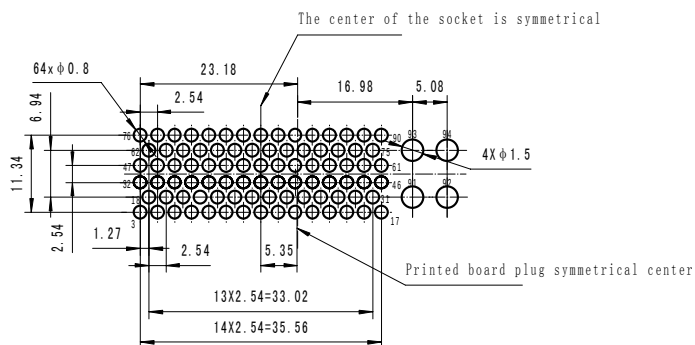
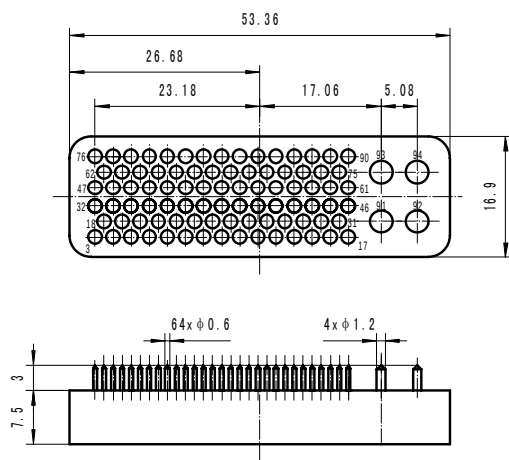
PCB plug R46B72T2K

Recommended PCB cutout dimensions



PCB plug R46B92T3K

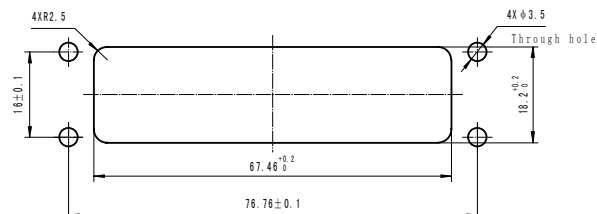
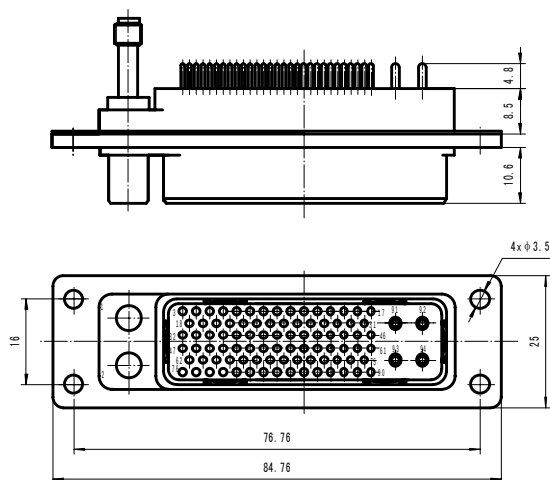
Recommended PCB cutout dimensions



Plug R46B92G2T1K

Only #2 cavity inside the product is loaded by coaxial contact D4-/SSMA-JK-2, use SSMA-JW5 for matching

Recommended panel cutout dimensions



The products below are series expanding products designed based on R46B68G2(insert arrangement 64+4+2). Their configuration and contact types are the same with R46B68G2, and the differences are the amount, length, direction and dimensions of $\Phi 0.8$ contact. Other configuration and dimensions are the same. Detailed insert arrangements are in the figure below. Contact cavity arrangement sequence in the figure is the sequence for receptacle mating interface.

