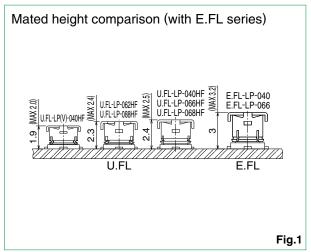
Ultra Small Surface Mount Coaxial Connectors - 1.9mm or 2.3mm, 2.4mm Mated Height

U.FL Series



Up to 6GHz



■Features

- 1. Nominal mated height of 1.9 or 2.3mm, 2.4mm (Max. 2.0 or 2.4mm, 2.5mm)(Fig.1)
- 2. Small mounting area

The receptacle occupies an area of 7.7mm².

3. Light weight

Receptacle: 15.7mg

4. Supports high frequency up to 6GHz

To meet the frequency requirements of a wide variety of miniature devices, the connectors offer high frequency performance from DC to 6GHz, with a V.S.W.R. of 1.3 to 1.5 max.

5. Automatic board placement

Packaged on tape-and-reel the receptacles can be placed with vacuum nozzles of the automatic placement equipment.

6. Plugs are terminated with ultra-fine coaxial (fluorinated resin insulated) cable

Standard ultra-fine coaxial cable of 0.81mm diameter (single braid shielding) is used for the plug termination, assuring secure and stable connections.

7. Simple connector mating / unmating

Use of available extraction tool assures correct disconnection of the plug and receptacle.

8. Verification of the fully mated condition

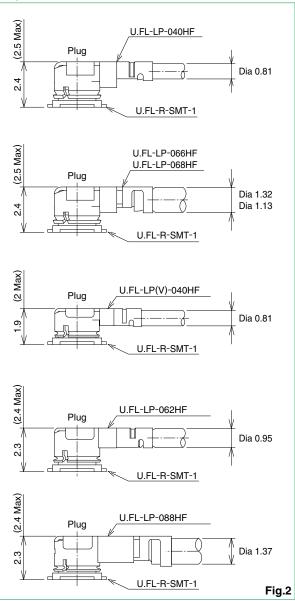
Tactile click sensation confirms fully mated condition, assuring complete electrical and mechanical connection.

9. Halogen-free*(Receptacle,plug(HF type))

*As defined by IEC61249-2-21

Br-900 ppm maximum, Cl-900 ppm maximum, CI+Br combined-1,500 ppm maximum

●Space Factor of Mated Connector



■Product Specifications

Ratings	Nominal characte	eristic impedance	50Ω	Operating temperature range	-40°C to +90°C	Storage temperature range	-30°C to +70°C
nailiys	Frequency ra	nge	DC to 6GHz	Operating humidity	90%RH max.	Storage humidity	90%RH max.
Item		Specification				Conditions	
1. Contact resistance		Center : 20mΩ max. Outer : 10mΩ max.			10mA max.		
2. Insulation resistance		500MΩ min.			100V DC		
3. Withsta	nding voltage	No flashover	or insulation bre	akdown.	200V AC / 1 r	minute	
			Part N	lo.	Up to 3	3GHz 3	to 6GHz
				Coaxial Cable Assembly	1.3 N	Max 1	.35 Max
		U.FL-LP(V)-04	40HF dia.0.81mr	n Coaxial Cable Assembly	1.3 N	Max 1	.3 Max
4. V.S.W.F	₹.*	U.FL-LP-068	HF dia.1.13mm (Coaxial Cable Assembly	1.3 N	Max 1	.4 Max
		U.FL-LP-066HF dia.1.32mm Coaxial Cable Assembly			1.3 N	Max 1	.5 Max
		U.FL-LP-062HF dia.0.95mm Coaxial Cable Assembly			1.3 Max 1		.3 Max
		U.FL-LP-088HF dia.1.37mm Coaxial Cable Assembly			1.3 N	1.3 Max 1.	
5. Durability (mating / un-mating, with corresponding plug) Contact resistance Center: $25m\Omega$ max. Outer: $15m\Omega$ max.			30 cycles				
6. Vibratio	n	No electrical disco		ectrical discontinuity of 1μ s min. mage, cracks or parts dislocation.		to 100Hz, single amplitudents 59m/s², for 5 cycles in the	direction of each
7. Shock						Acceleration of 735m/s², 11ms duration, sine half-wave waveform, 3 cycles in each of 3 axes.	
8. Humidit (Steady	•	No damage, cracks or parts dislocation. Insulation resistance 10MΩ min.(humidity high) Insulation resistance 500MΩ min.(dry)		96 hours at temperature of 40℃ and humidity of 95°			
		No damage, o	cracks or parts d	lislocation.	Temperature : $-40^{\circ}\text{C} \rightarrow +5 \text{ to } +35^{\circ}\text{C} \rightarrow +90^{\circ}\text{C} \rightarrow +5 \text{ to } +35^{\circ}\text{C}$		
9. Tempera	ature cycle	Contact resist	tance : 25mΩ ma	ax. (Center)	Time : 30min. → 3min. → 30min. → 3min.		
•			15mΩ ma	ax. (Outer)	5 cycles		
10. Salt spray No excessive corrosion			corrosion		5% salt water solution, 48 hours		

*V.S.W.R. Measurement System

The above V.S.W.R. standard values were measured using the measurement connection shown below.



- Note 1 : Cable type connectors were measured with SMA conversion adapters attached to both ends of the harness product of a suitable 100cm cable.
- Note 2 : Board type connectors were mounted to a 50Ω glass epoxy board and measurements were conducted with SMA conversion adapters attached.

■Material / Finish

Plug-right angle

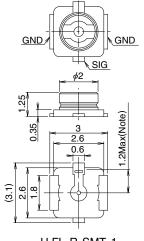
Part	Material	Finish/Remarks	
Shell	Phosphor bronze Silver plated		
Insulator	PBT, Color : Gray	UL94HB (LP (V) -040HF)	
insulator	LCP, Color : Milky-white	UL94V-0(040HF,066HF, 068HF, 062HF, 088HF)	
Female center contact	Phosphor bronze	Gold plated	

●Receptacle

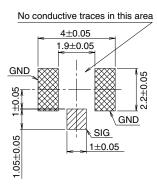
Part	Material	Finish/Remarks
Shell	Phosphor bronze	Silver plated
Insulator	LCP, Color : Milky-white	UL94V-0
Male center contact	Brass	Gold plated

■Receptacles





● Recommended PCB **Mounting Pattern**



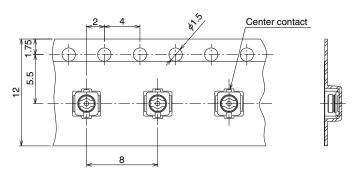
U.F	L-F	1-21VI	1 - 1

Part No.	HRS No.	Packaging	Weight / EA
U.FL-R-SMT-1(01)	331-0472-2 01	100 pcs/pack	
U.FL-R-SMT-1(60)	331-0472-2 60	4,000 pcs/reel	15.7/mg
U.FL-R-SMT-1(80)	331-0472-2 80	10,000 pcs/reel	

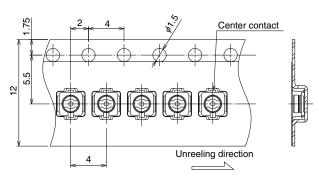
Note: This area may be covered by insulating material.

● Embossed Carrier Tape Dimensions(IEC 60286-3 compliant)

Embossed Carrier Tape Dimensions

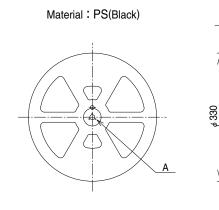


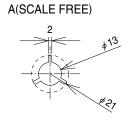
U.FL-R-SMT-1(60): 8mm pitch



U.FL-R-SMT-1(80): 4mm pitch

Reel Dimensions





13.5

■Cable Assembly (Plug)



	U.FL-LP-040HF	U.FL-LP-066HF U.FL-LP-068HF	U.FL-LP(V)-040HF(06)	U.FL-LP-062HF(06)	U.FL-LP-088HF(06)
Part No. Size	88	88	3.4	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	S 5 98
Mated Height	2.5mm Max.	2.5mm Max.	2.0mm Max.	2.4mm Max.	2.4mm Max.
	(2.4mm Nom.)	(2.4mm Nom.)	(1.9mm Nom.)	(2.3mm Nom.)	(2.3mm Nom.)
Applicable cable	Dia. 0.81mm	Dia. 1.13mm and Dia. 1.32mm	Dia. 0.81mm	Dia. 0.95mm	Dia. 1.37mm
Weight (mg)	54	59	35	45.5	72
Environmental compliant	Halogen-free, RoHS2 compliant				

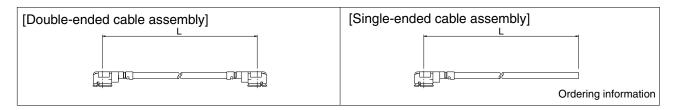
●Cable Guide

Cubic	-	u O						
	Cable	Cable Specification						
Description		Inner	Dielectric	Outer	Jacket	Flame Retardant	Nominal a	ttenuation
	Туре	Conductor*	Diameter	Conductor*	Diameter	Grade	At 3GHz	At 6GHz
Dia.0.81mm	0.4	7/0.05 SA	Dia.0.4mm	Single	Dia.0.81mm		E 4 dD/	0.040/
Coaxial Cable	04	(AWG#36)	FEP	Shield TA	FEP		5.4dB/m	8.0dB/m
Dia.1.13mm	000	7/0.08 SA	Dia.0.68mm	Single	Dia.1.13mm		0.70.10/	5.44.ID/
Coaxial Cable	068	(AWG#32)	FEP	Shield TA	FEP		3.73dB/m	5.44dB/m
Dia.1.32mm	000	7/0.08 SA	Dia.0.66mm	Double	Dia.1.32mm		0.040/	E 0-ID/
Coaxial Cable	066	(AWG#32)	FEP	Shield TA	FEP	1004	3.8dB/m	5.6dB/m
Dia.0.95mm	000	7/0.071 SA	Dia.0.62mm	Tape, single	Dia.0.95mm	- VW-1	0.4.10/	4.4.15/
Coaxial Cable	062	(AWG#33)	FEP	Shield TA	FEP		3.1dB/m	4.4dB/m
Dia.1.37mm	000	7/0.102 SA	Dia.0.88mm	Single	Dia.1.37mm		0.040/	4.0-10/
Coaxial Cable	088	(AWG#30)	FEP	Shield TA	FEP		2.8dB/m	4.3dB/m
Dia.1.37mm	000	7/0.102 SA	Dia.0.88mm	Tape, Single	Dia.1.37mm] [0.E-ID/	0.4-10/
Coaxial Cable	088	(AWG#30)	FEP/PTEE	Shield TA	FEP		2.5dB/m	3.4dB/m

[Plugs can be ordered only as terminated cable assemblies.]

⁽data as provided by cable suppliers, for reference only)

* SA: Silver plated annealed copper wire, TA: Tin plated annealed copper wire



Product Number Structure

Used plug: U.FL-LP(V)-040HF(06) U.FL-LP-040HF(Dia.0.81mm)

Double- $\frac{\text{U.FL}}{\bullet}$ - $\frac{\text{2LP}}{@}$ $\frac{\text{HF6}}{•}$ - $\frac{\text{04N}}{•}$ $\frac{\text{II}}{•}$ $\frac{\text{TV}}{•}$ - A - $\frac{\text{L}}{•}$

 Series name 	U.FL, UFL
2 Assembly type	LP : Single ended LPV : Plug(V) Single ended 2, 2LP : Double ended 2LPV plug(V) Double ended
3 Environmental compliant	HF6 : Halogen-free
4 Cable type	04N : Dia.0.81mm Ultra-fine coaxial cable
6 Cable color	1 : White, 2 : Black
6 Cable outer conductor	TV : Tin plated braided wire
Total length(mm)	Length(L)

Used plug: U.FL-LP-068HF(Dia.1.13mm)

Single- U.FL - LP HF6 - 068N [] T - A - L

Ended 1	<u> </u>		
Series name	U.FL, UFL		
2 Assembly type	LP : Single ended 2, 2LP : Double ended		
3 Environmental compliant	HF6 : Halogen-free		
Cable type	068Y: 068N: Dia.1.13mm Ultra-fine coaxial cable		
6 Cable color	1 : Gray, 2 : Black		
6 Cable outer conductor	T : Tin plated braided wire		
Total length(mm)	Length(L)		

Used plug: U.FL-LP-066HF(Dia.1.32mm)

Single- <u>U.FL</u> - <u>LP</u> <u>HF6</u> - <u>066N</u> [] - A - <u>L</u>

Ended ()	0 0 0		
Series name	U.FL, UFL		
Assembly type	LP : Single ended		
	2, 2LP : Double ended		
3 Environmental compliant	HF6 : Halogen-free		
4 Cable type	066N : Dia.1.32mm Ultra-fine coaxial cable		
6 Cable color	1 : Gray, 2 : Black		
Total length(mm)	Length(L)		

Used plug: U.FL-LP-062HF(06)(Dia.0.95mm)

 Series name 	U.FL, UFL
2 Assembly type	LP : Single ended 2, 2LP : Double ended
3 Environmental compliant	HF6 : Halogen-free
Cable type	062N : Dia.0.95mm Ultra-fine coaxial cable
6 Cable color	1 : Gray, 2 : Black
6 Cable outer conductor	D : Copper tape + Tin plated braided wire
Total length(mm)	Length(L)

Used plug: U.FL-LP-088HF(06)(Dia.1.37mm)

Single- U.FL - LP HF6 - 088N [] T - A - L

U.FL, UFL
LP : Single ended
2, 2LP : Double ended
HF6 : Halogen-free
088Y: Dia.1.37mm Ultra-fine coaxial cable
U88IN :
1 : Gray, 2 : Black
T : Tin plated braided wire
PD : Copper tape + Tin plated braided wire
Length(L)

Standard tolerances for (L)

(L)(mm)	Standard Tolera(mm)
*L=35 to 200	±4
L=200 to 500	±8
L=500 to 1000	±12
L=Longer than 1000	±1.5% of (L)

Note: Minimum available length(L) is 35mm

■Conversion Adapters

●SMA Conversion Adapter (Mating portion: U.FL side jack - SMA side plug)



Note: The U.FL side mating portions has a lower lock retention force than the regular product, therefore, cannot be used for purposes other than performance measurements.

SMA Conversion Adapter (Mating portion: U.FL side plug - SMA side jack)



Note: The U.FL side mating portions has a lower lock retention force than the regular product, therefore, cannot be used for purposes other than performance measurements.

●SMA Conversion Adapter (Mating portion: U.FL side plug - SMA side jack)



Note: This connector is used by compressing the mated portion of U.FL side onto the U.FL-R-SMT-1 portion.

■Receptacle to Inspection



This receptacle is used for inspecting the continuity, withstand voltage, and other aspects of the harness product.

◆Plug Extraction Tool

This tool is used for extraction from a mating condition.

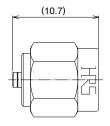


Note: Part No. U.FL-LP-N-2 for U.FL-LP-040HF/066HF/088HF/068HF. Part No. U.FL-LP(V)-N-2 for U.FL-LP(V)-040HF/U.FL-LP-062HF.

▶ Plug Insertion Tool

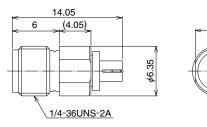
This tool is for mating U.FL series plug into receptacle.



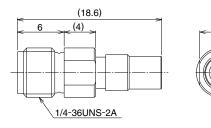




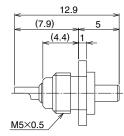
Part No.	HRS No.
HRMP-U.FLJ(40)	311-0300-2 40

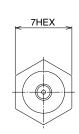


Part No.	HRS No.
HRMJ-U.FLP(40)	311-0301-5 40

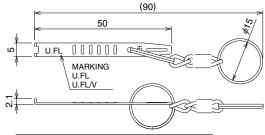


Part No.	HRS No.	
HRMJ-U.FLP-ST1(40)	311-0385-5 40	

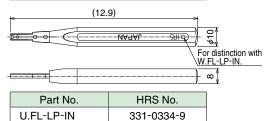




Part No.	HRS No.
U.FL-R-1	331-0466-0



	Part No.	HRS No.
	U.FL-LP-N-2	331-0494-5
ſ	U.FL-LP(V)-N-2	331-0493-2

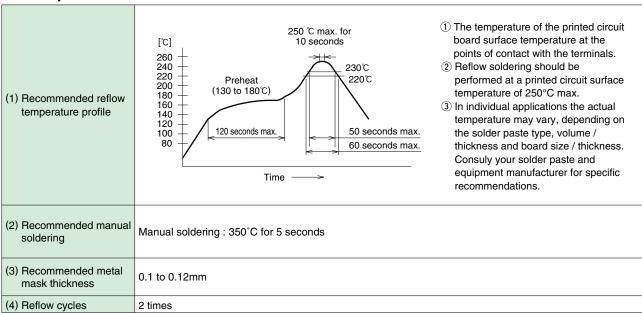


● Usage Precautions

1. Plugs

(1) Mating / unmating	1) To disconnect connectors, insert the end portion of U.FL-LP-N-2 and U.FL-LP(V)-N-2 under the connector flanges and pull off vertically, in the direction of the connector mating axis. 2) To mate the connectors, the mating axes of both connectors must be aligned and the connectors can be mated. The "click" will confirm fully mated connection.Do not attempt to insert on an extreme angle. U.FL Cable Assembly U.FL-R-SMT-1	
(2) Pull forces on the cable after connectors are mated.	After the connectors are mating, do not apply a load to the cable in excess of the values indicated in the diagram below. U.FL-LP Cable Assembly 1N max (U.FL-LP(V)-040HF, U.FL-LP-062HF) 2N max (U.FL-LP-040HF, U.FL-LP-068HF, U.FL-LP-088HF)	
(3) Precautions	Do NOT forcefully twist or deform wires.	

2. Receptacles



3. Operating environment and storage conditions

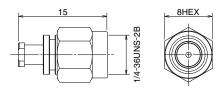
	The connectors are not designed to operate in the following environments :
	Exposed to a excessive amounts of fine particles and dust
(1) Operating environment	• Regions and places having a high density of sulfur dioxide, hydrogen sulfide, nitrogen dioxide or other corrosive
	gasses.
	Environments having large rapid variations in temperature.
	Store in the Hirose Electric packaging.
(2) Storage conditions -	Temperature: -10 to $+40^{\circ}$, Humidity: 85% max.
• •	Use within 6 months of delivery.
Receptacle	Receptacles for which the storage period has elapsed must be tested for solderability to the PC board
	mounting surface.

■SMA cable type

SMA

Straight Plug

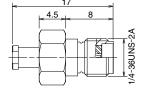




Part No.	HRS No.	Applicable cable
HRM-200-040PBN(40)	323-0790-3 40	Dia. 0.81 type
HRM-200-066PBN(40)	323-0791-6 40	Dia. 1.13, Dia.1.32 type
HRM-200-088PBN(40)	323-0800-5 40	Dia. 1.37 type

Straight Jack





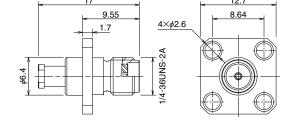


8HEX

Part No.	HRS No.	Applicable cable
HRM-200-040JBN(40)	323-0792-9 40	Dia. 0.81 type
HRM-200-066JBN(40)	323-0793-1 40	Dia. 1.13, Dia.1.32 type
HRM-200-088JBN(40)	323-0801-8 40	Dia. 1.37 type

● Panel mount Jack (Four Screws)

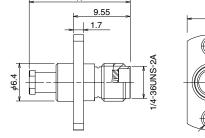


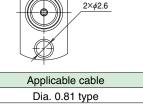


Part No.	HRS No.	Applicable cable
HRM-200-040PJ4BN(40)	323-0795-7 40	Dia. 0.81 type
HRM-200-066PJ4BN(40)	323-0796-0 40	Dia. 1.13, Dia.1.32 type
HRM-200-088PJ4BN(40)	323-0803-3 40	Dia. 1.37 type

● Panel mount Jack (Two Screws)



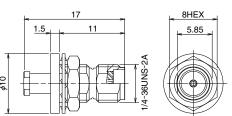




Part No.	HRS No.	Applicable cable
HRM-200-040PJ2BN(40)	323-0794-4 40	Dia. 0.81 type
HRM-200-066PJ2BN(40)	323-0788-1 40	Dia. 1.13, Dia.1.32 type
HRM-200-088PJ2BN(40)	323-0802-0 40	Dia. 1.37 type

● Panel mount Jack (Bulkhead)





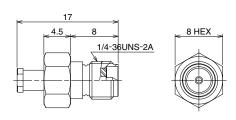
5.9 +0.1	
\$\\\\phi 6.4 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	

Part No.	HRS No.	Applicable cable
HRM-200-040BPJBN(40)	323-0797-2 40	Dia. 0.81 type
HRM-200-066BPJBN(40)	323-0798-5 40	Dia. 1.13, Dia.1.32 type
HRM-200-088BPJBN(40)	323-0804-6 40	Dia. 1.37 type

Reverse polarity SMA

Straight Jack

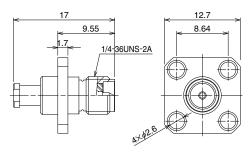




Part No.	HRS No.	Applicable cable
SMA(R)-200-040JBN	323-0926-3	Dia. 0.81 type
SMA(R)-200-066JBN	323-0931-3	Dia. 1.13, Dia.1.32 type
SMA(R)-200-088JBN	323-0904-0	Dia. 1.37 type

● Panel mount Jack (Four Screws)

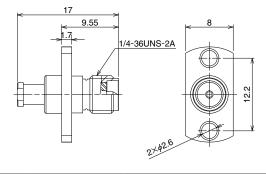




Part No.	HRS No.	Applicable cable
SMA(R)-200-040PJ4BN	323-0928-9	Dia. 0.81 type
SMA(R)-200-066PJ4BN	323-0932-6	Dia. 1.13, Dia.1.32 type
SMA(R)-200-088PJ4BN	323-0934-1	Dia. 1.37 type

● Panel mount Jack (Two Screws)

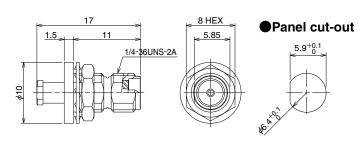




Part No.	HRS No.	Applicable cable
SMA(R)-200-040PJ2BN	323-0929-1	Dia. 0.81 type
SMA(R)-200-066PJ2BN	323-0933-9	Dia. 1.13, Dia.1.32 type
SMA(R)-200-088PJ2BN	323-0935-4	Dia. 1.37 type

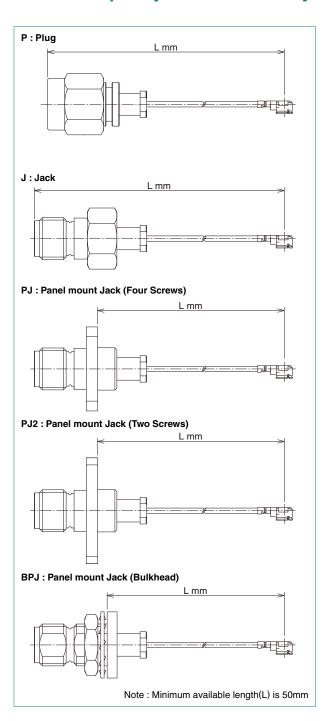
● Panel mount Jack (Bulkhead)



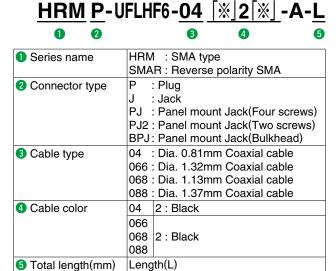


Part No.	HRS No.	Applicable cable
SMA(R)-200-040BPJBN	323-0927-6	Dia. 0.81 type
SMA(R)-200-066BPJBN	323-0902-5	Dia. 1.13, Dia.1.32 type
SMA(R)-200-088BPJBN	323-0901-2	Dia. 1.37 type

■How To Specify Cable Assembly



Ordering information

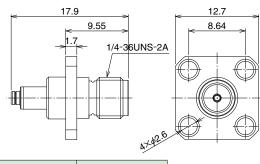


■SMA conversion adapter

SMA

● Panel mount adapter (Four Screws)

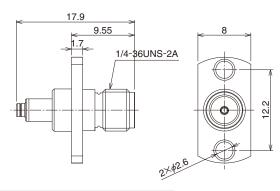




Part No.	HRS No.
HRMJ-U.FLJ-PA4	311-0465-2

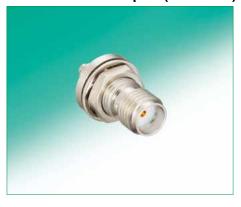
● Panel mount adapter (Two Screws)

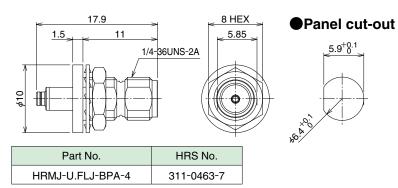




Part No.	HRS No.
HRMJ-U.FLJ-PA2	311-0467-8

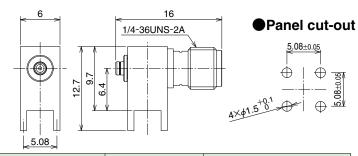
Panel mount adapter (Bulkhead)





●PCB mount adapter



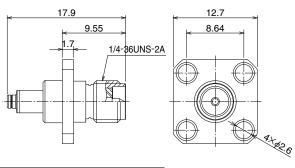


Part No.	HRS No.	Finish
HRMJ-U.FLJ-PC	311-0411-3	Nickel plated
HRMJ-U.FLJ-PC(01)	311-0411-3 01	Gold plated

Reverse polarity SMA

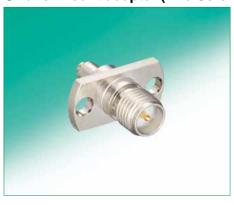
●Panel mount adapter (Four Screws)

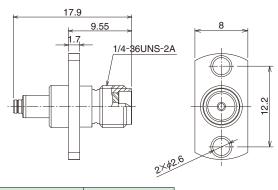




Part No.	HRS No.
SMA(R)J-U.FLJ-PA4	311-0466-5

Panel mount adapter (Two Screws)

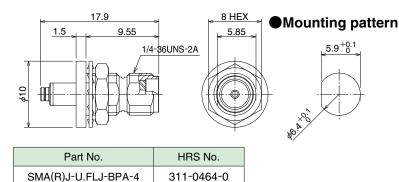




Part No.	HRS No.
SMA(R)J-U.FLJ-PA2	311-0468-0

Panel mount adapter (Bulkhead)







HIROSE ELECTRIC CO.,LTD.

2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN TEL: +81-45-620-3526 Fax: +81-45-591-3726 http://www.hirose.com

http://www.hirose-connectors.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Hirose Electric:

U.FL-2LP-04N1-A-(400) U.FL-LP-04N1-A-(400) U.FL-LP-04N1-A-(800) U.FL-2LP-04N1-A-(800) U.FL-LP-04N1-A-(190) U.FL-2LP-04N1-A-(250) U.FL-2LP-062N1D-A-(100) U.FL-2LP-062N1D-A-(150) U.FL-LP-04N1-A-(200) U.FL-2LP-04N1-A-(600) U.FL-LP-04N1-A-(250) U.FL-2LP-04N1-A-(160) U.FL-LP-04N1-A-(110) U.FL-LP-04N1-A-(900) U.FL-2LP-04N1-A-(140) U.FL-2LP-04N1-A-(180) U.FL-LP-04N1-A-(120) U.FL-2LP-062N1D-A-(50) U.FL-2LP-04N1-A-(170) U.FL-2LP-04N1-A-(130) U.FL-2LP-04N1-A-(1000) U.FL-2LP-04N1-A-(120) U.FL-2LP-04N1-A-(900) U.FL-LP-04N1-A-(130) U.FL-LP-04N1-A-(170) U.FL-LP-04N1-A-(150) U.FL-LP-04N1-A-(100) U.FL-LP-04N1-A-(180) U.FL-LP-04N1-A-(160) U.FL-LP-04N1-A-(140) U.FL-2LP-062N2D-A-(300) U.FL-LP-088K2T-A-(300) U.FL-2LP-066J1-A-(80) U.FL-2LP-066J1-A-(40) U.FL-2LP-066J1-A-(60) U.FL-2LP-066J1-A-(50) U.FL-2LP-066J1-A-(90) U.FL-LP-088K2T-A-(400) U.FL-2LP-066J1-A-(70) U.FL-2LP-062N2D-A-(800) U.FL-LP-066J1-A-(200) U.FL-LP-066J1-A-(250) U.FL-2LP(V)-04N1-A-(300) U.FL-2LP-088K2T-A-(250) U.FL-LP-066J1-A-(600) U.FL-2LP-088K2T-A-(600) U.FL-2LP-066J1-A-(35) U.FL-2LP-088K2T-A-(700) U.FL-2LP-088K2T-A-(500) U.FL-2LP(V)-04N1-A-(230) U.FL-2LP(V)-04N1-A-(270) U.FL-2LP(V)-04N1-A-(240) U.FL-2LP(V)-04N1-A-(200) U.FL-2LP(V)-04N1-A-(280) U.FL-LP-088K2T-A-(700) U.FL-2LP(V)-04N1-A-(220) U.FL-2LP(V)-04N1-A-(700) U.FL-LP-066J1-A-(700) U.FL-2LP-062N2D-A-(400) U.FL-LP-088K2T-A-(800) U.FL-2LP(V)-04N1-A-(400) U.FL-2LP-088K2T-A-(300) U.FL-LP-066J1-A-(300) U.FL-2LP(V)-04N1-A-(800) U.FL-2LP(V)-04N1-A-(260) U.FL-LP-066J1-A-(400) U.FL-2LP-062N2D-A-(700) U.FL-LP-088K2T-A-(500) U.FL-LP-088K2T-A-(900) U.FL-2LP(V)-04N1-A-(500) U.FL-2LP-062N2D-A-(500) U.FL-LP-088K2T-A-(150) U.FL-2LP-062N2D-A-(900) U.FL-2LP-088K2T-A-(400) U.FL-2LP-088K2T-A-(800) U.FL-LP-04N1-A-(600) U.FL-R-1 U.FL-2LP-062N1D-A-(35) U.FL-LP-088K2T-A-(100) U.FL-2LP(V)-04N1-A-(150) U.FL-LP(V)-N-2 U.FL-2LP-062N2D-A-(1000) U.FL-2LP-062N2D-A-(120) U.FL-2LP-062N2D-A-(1500) U.FL-LP-066J1-A-(800) U.FL-2LP(V)-04N1-A-(170) U.FL-2LP(V)-04N1-A-(110) U.FL-2LP(V)-04N1-A-(190) U.FL-2LP(V)-04N1-A-(160) U.FL-2LP(V)-04N1-A-(120) U.FL-2LP(V)-04N1-A-(180) U.FL-2LP(V)-04N1-A-(140) U.FL-2LP(V)-04N1-A-(900) U.FL-2LP(V)-04N1-A-(130) U.FL-2LP-062N1D-A-(600) U.FL-2LP(V)-04N1-A-(60) U.FL-2LP(V)-04N1-A-(90) U.FL-2LP-062N1D-A-(250) U.FL-LP(V)-N-2(01) U.FL-2LP(V)-04N1-A-(50)