

2.4mm coaxial connectors for frequency test measurements

2.4mm Series

Compatible with 50GHz configurations



■ Features

1. 2.4mm coaxial connector based on MIL Specifications

(MIL-STD-348B)

2. Compatible with the frequency range of up to 50GHz

3. Easy to mount

Simplified mounting with attaching screws.

4. Can be adapted to various PCB thicknesses

Screw-on mounting allows attachment to PCB boards with different thicknesses.

5. Gold plating on the PCB evaluation side provides stable grounding

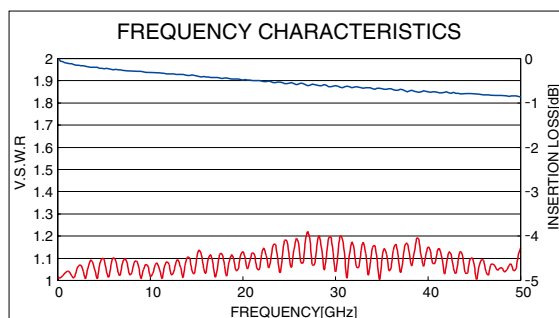
6. Applicable cable : 0.085 inch semi-flexible cable.

7. RoHS-compatible

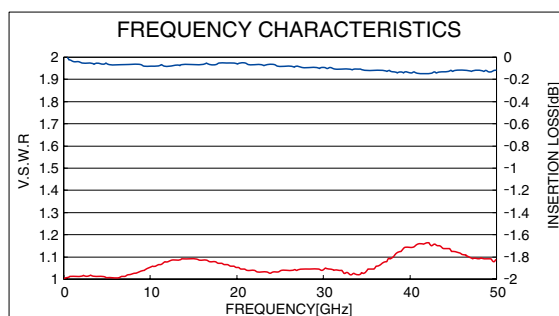
Compliant with all RoHS Directives.

● Frequency characteristics (Typical values)

◆ H2.4-P-SF085 with double ended harness assembly, frequency characteristics (Cable length : 100mm)



◆ H2.4-R-SR2 frequency characteristics



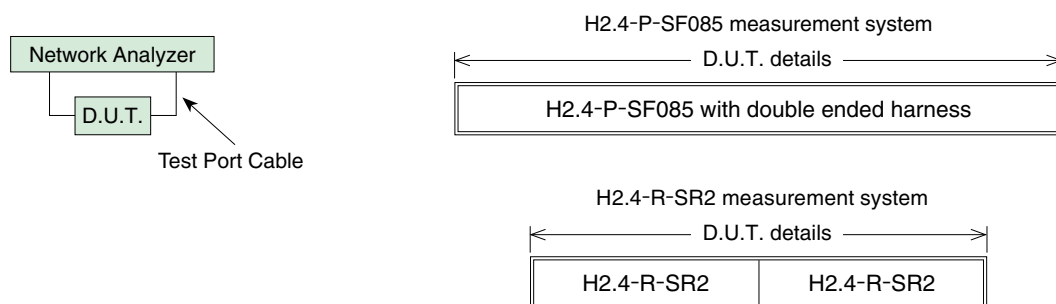
Product Specifications

Ratings	Nominal characteristic impedance	50Ω	Operating Temperature Range	-55℃ to +105℃ (95% RH or less)
	Rated frequency	DC to 50GHz	Storage Temperature Range	-55℃ to +50℃ (95% RH or less)

Items	Specifications	Conditions
1. Contact resistance	Center : Less than 4mΩ External : Less than 2mΩ	Measured at less than 100mA
2. Insulation resistance	1,500MΩ min. (H2.4-P-SF085) 5,000MΩ min. (H2.4-R-SR2)	Measured at 500V DC
3. Withstanding voltage	No flashover or breakdown	500V AC for one minute
4. Voltage standing wave ratio	●H2.4-P-SF085	●H2.4-R-SR2
	V.S.W.R. : Less than 1.35 (DC to 40GHz)	V.S.W.R. : 1.35 (DC to 26.5GHz)
	V.S.W.R. : Less than 1.45 (40GHz to 50GHz)	V.S.W.R. : 1.4 (26.5GHz to 40GHz)
		V.S.W.R. : 1.45 (40GHz to 50GHz)
5. Mating Cycles	Contact resistance at center : Less than 6mΩ External : Less than 4mΩ No broken, cracked, or loose parts	500 cycles
6. Vibration resistance	No electrical discontinuity for more than 1μs. No broken, cracked, or loose parts	Frequency : 10 to 2000Hz, half amplitude : 0.75mm, Acceleration : 196m/s ² , 10 cycles in each of 3 axis directions
7. Shock resistance	No electrical discontinuity for more than 1μs. No broken, cracked, or loose parts	Acceleration : 980m/s ² , duration : 6ms, Wave form : half-sine wave, 3 times in each of 3 directions
8. Moisture resistance of temperature/humidity cycle	Insulation resistance : More than 100MΩ (in a high humidity environment) Insulation resistance : More than 500MΩ (in a dry environment) No broken, cracked or loose parts	Left for 10 cycles (240 hours) in an environment with the temperature ranging from -10 to 65℃ and the humidity ranging from 90 to 98%.
9. Temperature cycle	No broken, cracked or loose parts	Temperature : 5 cycles for a series of time periods : -55℃ for 30 minutes → 3 minutes → +105℃ for 30 minutes → 3 minutes
10. Salt spray	No considerable corrosion	Continuous 48 hour cycle in 5% salt water solution

*Measurement of voltage standing wave ratio (V.S.W.R.)

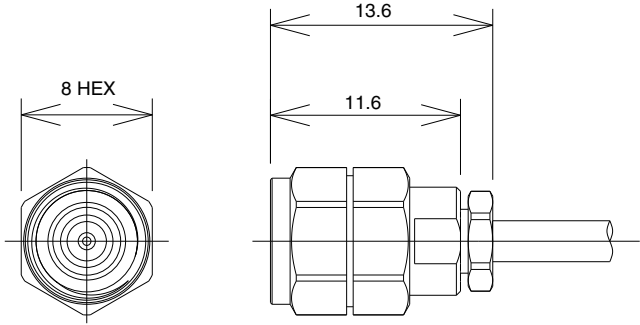
The specified values of the voltage standing wave ratio (V.S.W.R.) noted above, are taken with the test set up shown in the figure below:



Materials / Finish

Part	Materials	Finish
Shell	Stainless steel	Passivated
Insulator	PTFE resin	—
Contact	Beryllium copper	Gold plating
Ring	Stainless steel	Gold plating

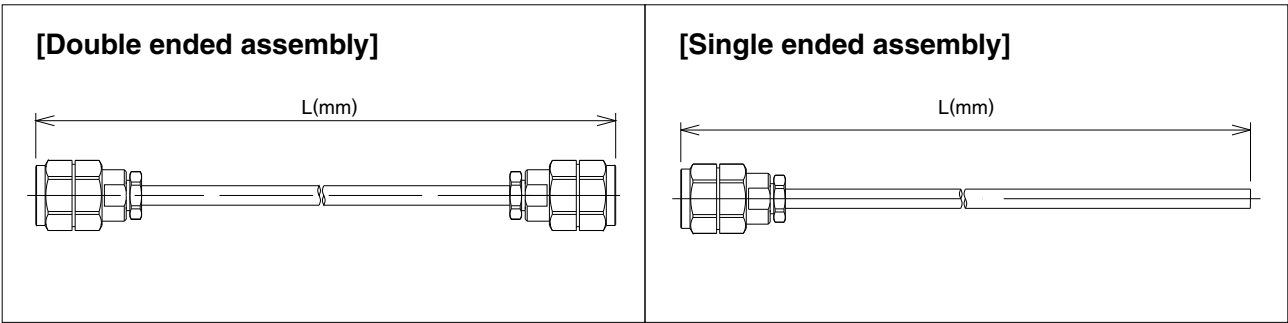
■ Plug
H2.4-P-SF085



[Please place cable assembly orders per the specifications below]

■ Cable assembly specifications

Please specify the dimensions of 2.4mm Series cable assembly as follows : For the cable length, Please contact HRS representative.



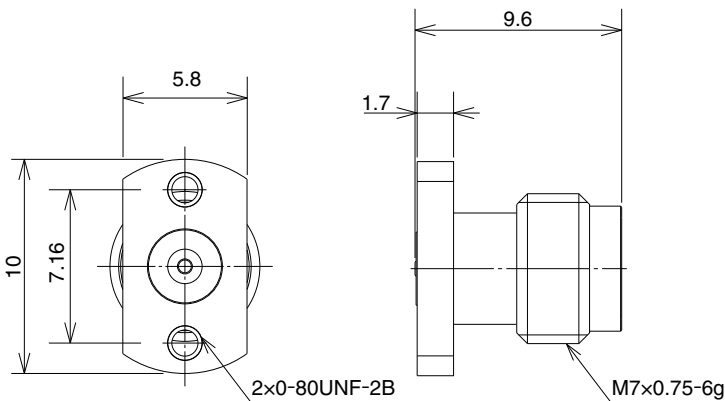
● Composition of the cable harness specification product number structure

Refer to the chart below when determining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

H2.4 - [] P - SF085N 1 - A - L RS
① ② ③ ④ ⑤

① Series identifier : H2.4
② Harness type None : On either end 2 : On both ends
③ Cable type SF085N : 0.085-inch, semi-flexible cable
④ Cable color None : No jacket 1 : Blue
⑤ Overall length L (mm) : Length L is expressed by the unit of mm.

■PCB vertical mount receptacle



Part No.	HRS No.	Attached screw	RoHS
H2.4-R-SR2	338-0601-8		○
H2.4-R-SR2(11)	338-0601-8 11	0-80UNF 1/4inch	
H2.4-R-SR2(12)	338-0601-8 12	0-80UNF 3/16inch	

This receptacle is for highfrequency measurement only.
It cannot be used actual machine.



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>