

Focus & Simple



FOCUSIMPLE High Power

RF Cable Assembly

2023





High Power RF Cable Assembly

Based on wafer, packaging and testing applications, Focusimple Electronics is capable of robust, ultra-flexible microwave test cables and cable assemblies with strict standards and experience in high-volume R&D and manufacturing. Our products have a long lifespan in high-temperature environment with strong environmental resistance and can carry high average and peak power as well. The construction could ensure the requirements of low loss, high RF shielding and low VSWR.

Providing phase-matching, electrical length matching and customized labels. Complete test data for parameters such as VSWR, insertion loss, dielectric withstand voltage, power and temperature rise are available on request.

Applications

Semiconductor equipment: coating (CVD, PECVD, ALD, PVD, etc.), dry etching, removing of photoresist;

High-power devices: Amplifiers, High-power lasers, High-power radar, RF power supplies, RF power matcher, magnetic resonance imaging;

Features

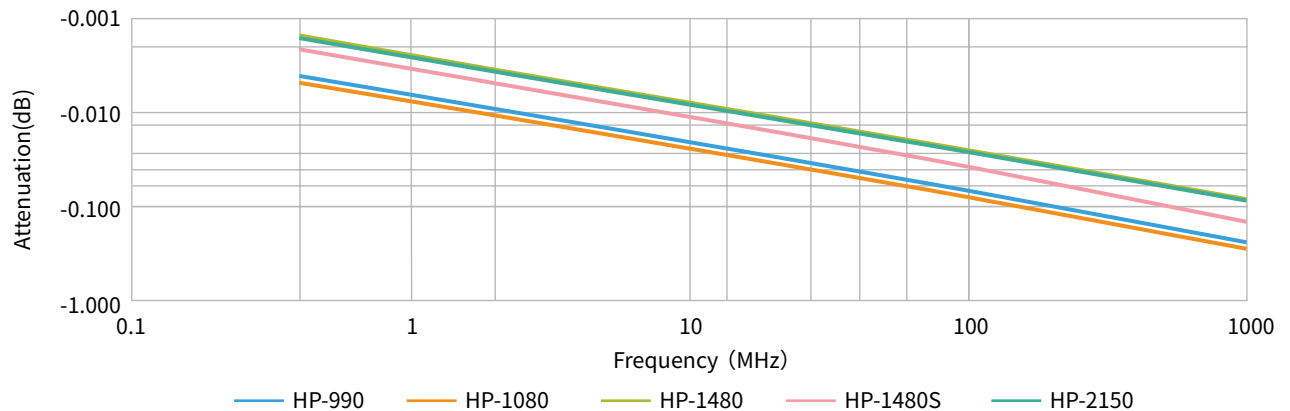
Low VSWR and loss

High current

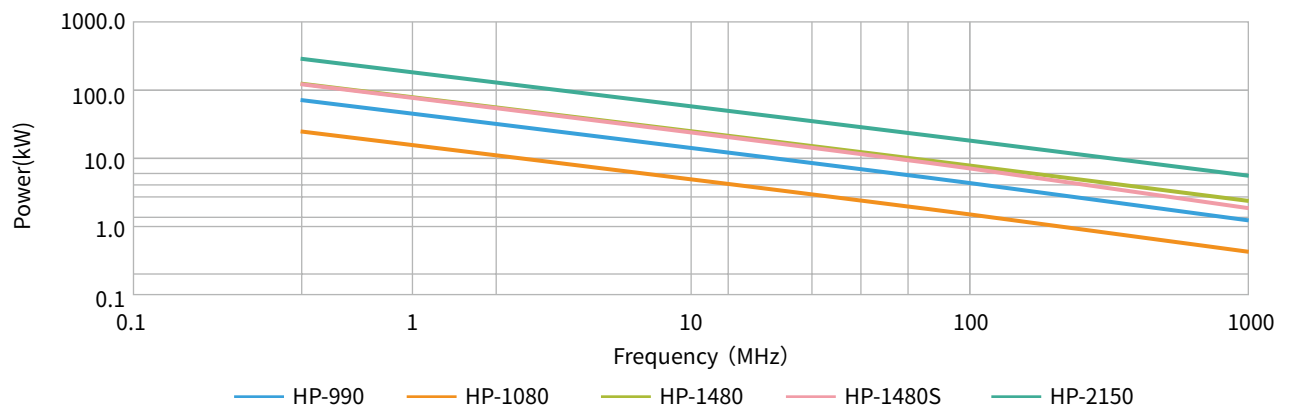
high withstand voltage

Great creepage distance

Frequency& Attenuation



Frequency& Power



Specifications

Electrical Specifications

Cable Type	HP-990		HP-1080		HP-1480		HP-1480S		HP-2150	
MAX Frequency(GHz)	3		3		6		3		3	
Velocity of Propagation	71%		66%		76%		76%		76%	
Voltage Withstand(DC, V)	5000		3700		5000		5000		9450	
Impedance(Ω)	50									
Shielding Effectiveness(dB)	> 70		> 70		> 100		> 100		> 70	
Attenuation & Power Handling	Attenuation and rated power (25°C room temperature, sea level, VSWR 1:10)									
Frequency(MHz)	dB/m	kW	dB/m	kW	dB/m	kW	dB/m	kW	dB/m	kW
0.4	0.0040	74.70	0.0047	26.17	0.0015	129.04	0.0021	127.01	0.0016	295.81
2	0.0090	33.25	0.0104	11.65	0.0035	57.60	0.0048	56.30	0.0036	132.08
13.56	0.0236	12.60	0.0276	4.41	0.0091	22.00	0.0128	21.08	0.0095	50.49
27.12	0.0337	8.83	0.0394	3.09	0.0129	15.50	0.0185	14.66	0.0135	35.59
40.68	0.0416	7.16	0.0486	2.51	0.0158	12.62	0.0229	11.82	0.0166	28.99
60	0.0509	5.85	0.0594	2.05	0.0193	10.36	0.0282	9.59	0.0202	23.81
100	0.0665	4.47	0.0778	1.56	0.0250	7.98	0.0373	7.26	0.0262	18.36
1000	0.2362	1.26	0.2767	0.44	0.0831	2.40	0.1441	1.88	0.0863	5.57

Mechanical Specifications

Center Conductor(mm)	Stranded SPC(2.39)	Stranded SPC(2.26)	copper(4.00)	Stranded SPC(4.08)	Stranded SPC(6.00)
Jacket(mm)	FEP(9.90)	PVC(10.80)	FEP(14.80)	PUR(14.60)	PUR(21.50)
Bend Radius: installation(mm)	50.0	40.0	74.0	73.0	108.0
Bend Radius: repeated(mm)	100.0	108.0	148.0	146.0	220.0
Weight(g/m)	260.0	185.0	340.0	420.0	900.0

Environmental Specifications

Temperature Range (° C)	-55 ~ +200	-40 ~ +80	-55 ~ +165	-55 ~ +105	-55 ~ +105
-------------------------	------------	-----------	------------	------------	------------

High Power Connector Outline Drawing

					
N Male Right Angle for HP-990	7/16 Male Right Angle for HP-990	HN Male Right Angle for HP-990	LC Male Right Angle for HP-990	QRM Male Right Angle for HP-990	
					
					

Note: Support customization. For other connectors, please contact Focusimple.

Connector Selection

HP Assembly		HP-990	HP-1080	HP-1480	HP-1480S	HP-2150
Connector Code	Connector Type	9.9	10.8	14.8	14.6	21.5
NM	N Male	●	●	●	●	
NMR	N Male RA	●	●			
716M	7/16 Male	●	●	●	●	●
716MR	7/16 Male RA	●	●	●	●	●
HM	HN Male	●	●	●	●	
HMR	HN Male RA	●	●	●	●	
QRMM	MPQD Male	●		●	●	
QRMMR	MPQD Male RA	●		●	●	
LCM	LCM Male	●		●	●	●
LCMR	LCM Male RA	●		●	●	●
HPQDM	HPQD Male	●		●	●	
HPQDMR	HPQD Male RA			●	●	

Note: Support customization. For other connectors, please contact Focusimple.

Assembly Selection Information

Cable Code: _____

990
1080
1480
1480S
2150

HPXXXX-XXXX XXXX-XX.XX X

M: Meter
F: Foot

Connector type, independent on both sides
Refer to connector selection table for code

Length
Add 0 if the length code is less than 4 bits
For example, 8=08.00

Similar Cable Replacement Table

F+S	TIMES	TRU
HP-990	RG-393	RG-393
HP-1080	RG-214	
HP-1480	AA-8980	
HP-1480S	AA-11223	TRU-560
HP-2070	SFT-900	
HP-2150	HPL-218	
HP-3050	HPL-1200	

Contact US



Jiaxing Focusimple Electronics Co., Ltd

No.1068, Wenchuan Road, Xiuzhou District, Jiaxing, Zhejiang, PRC,
Postcode: 314000

Tel: +86-573-83528518

Fax: +86-573-83528519

Web: www.focusimple.com E-mail: int@focusimple.com