

HF77 20 GHz | H-MTD Female 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	20	

Mechanical specifications

	2x Signal	1x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

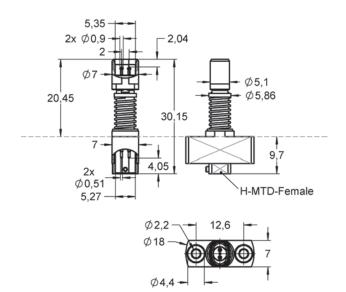
Accessories

1104597	F07702B090G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1104600 HF77HMTDf0120G1020HMTDmF

Series drawing





HF77 20 GHz | H-MTD Female 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	20	

Mechanical specifications

	4x Signal	2x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

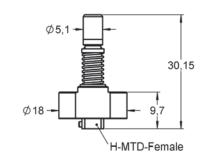
Accessories

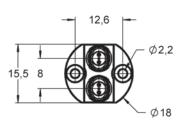
1104597	F07702B090G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1110046 HF77HMTDf0220G2040HMTDmF

Series drawing







20 GHz | H-MTD Female 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	20	

Mechanical specifications

	8x Signal	4x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring Ground	Spring steel	gold plated
Flange	Brass	nickel plated

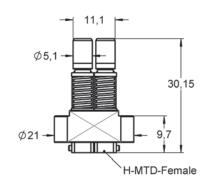
Accessories

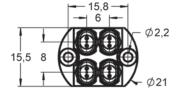
1104597	F07702B090G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1110047 HF77HMTDf0420G4080HMTDmF

Series drawing







14 GHz | H-MTD Male 1-fold or GEMnet

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	2x Signal	1x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	Brass	unplated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

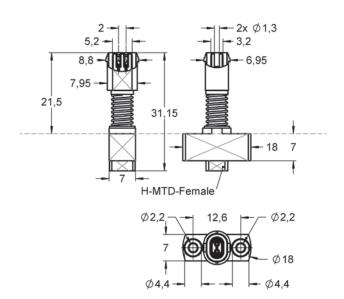
Accessories

1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1051338 HF77HMTDm0114G1020HMTDmF

Series drawing





14 GHz | H-MTD Male 2-fold or GEMnet

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	4x Signal	2x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	Brass	unplated
Barrel	Brass	gold plated
Spring Signal	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

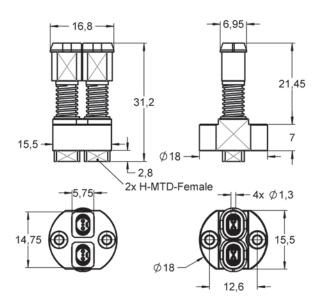
Accessories

1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1082740 HF77HMTDm0214G2040HMTDmFV01

Series drawing





14 GHz | H-MTD Male 4-fold or GEMnet

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	8x Signal	4x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	Brass	unplated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

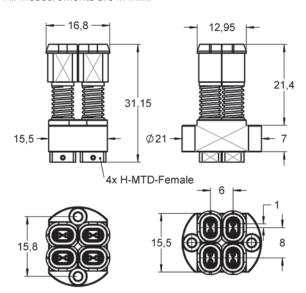
Accessories

1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1050859	HE77HMTDm0414G4080HMTDmF	

Series drawing





14 GHz | H-MTD Male 6-fold or GEMnet

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	12x Signal	6x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	Brass	unplated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

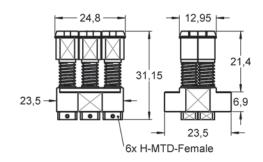
Accessories

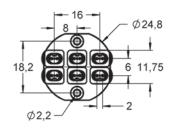
1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1119247 HF77HMTDm0614G6120HMTDmF

Series drawing







14 GHz | H-MTD 1-fold | Water proof

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	2x Signal	1x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	gold plated
Flange	Brass	nickel plated

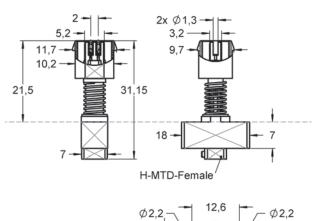
Accessories

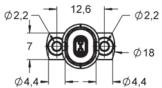
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1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1089316	HE77HMTDm0114G1020HMTDmEWE	,

Series drawing







14 GHz | H-MTD Male 2-fold | Water proof

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.2	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	4x Signal	2x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	Brass	unplated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

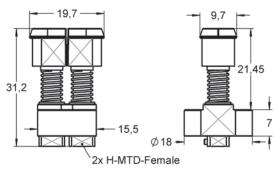
Accessories

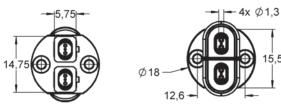
1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1089789 HF77HMTDm0214G2040HMTDmFWP

Series drawing







14 GHz | H-MTD Male 4-fold | Water proof

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	100	
Frequency [GHz]	14	

Mechanical specifications

	8x Signal	4x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	gold plated
Flange	Brass	nickel plated

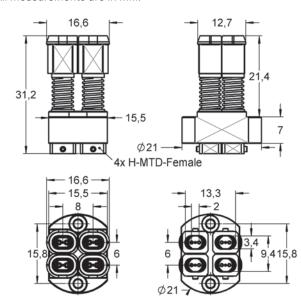
Accessories

1050050	50775404000405	
1053952	F07751B130G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Female	see page 128

Order code Product name

1089897	HE77HMTDm0414G4080HMTDmFWP	

Series drawing





HF77 12 GHz | HFM Female 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	130
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	3.0
Maximum travel (mm)	1.8	3.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

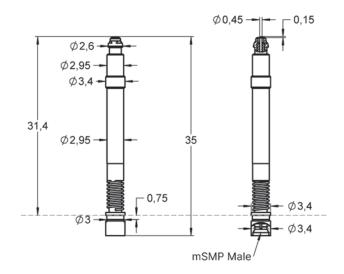
Accessories

Interface	mSMP Male	see page 128
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Order code Product name

1051683 HF77HFMf0112G540MSMPmP

Series drawing





HF77 12 GHz | HFM Female 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	130
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	3.0
Maximum travel (mm)	1.8	3.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

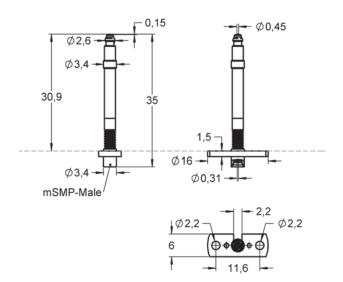
Accessories

10E1602			
1051683	HF//HFIVIIU1120	HF77HFMf0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1051503 HF77HFMf0112G540MSMPmF

Series drawing





HF77 12 GHz | HFM Female 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	1x Ground
Preload (cN)	95	130
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	3.0
Maximum travel (mm)	1.8	3.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

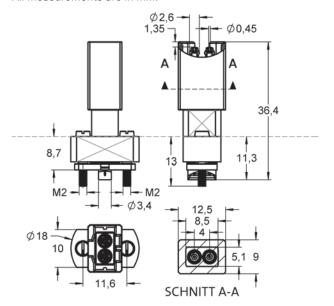
Accessories

10E1602			
1051683	HF//HFIVIIU1120	HF77HFMf0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1114067 HF77HFMf0212G1080MSMPmF

Series drawing





HF77 12 GHz | HFM Female 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1.0	
Current Circular [A]	1.0	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	1x Ground
Preload (cN)	95	130
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	3.0
Maximum travel (mm)	1.8	3.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

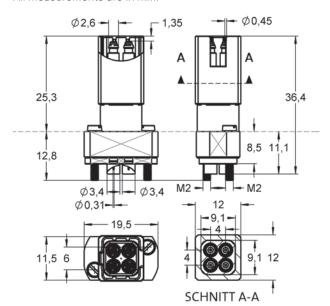
Accessories

10E1602			
1051683	HF//HFIVIIU1120	HF77HFMf0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1050858 HF77HFMf0412G2160MSMPmF

Series drawing





HF77 12 GHz | HFM Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

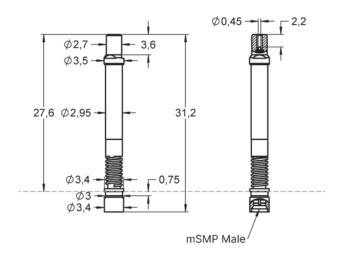
Interfoce	ma CNAD Mala	100
Interface	mSMP Male	see page 128

Order code Product name

1034900 HF77HFMm0112G540MSMPmP

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | HFM Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	0.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

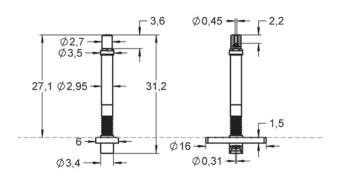
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1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

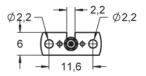
Order code Product name

1036171 HF77HFMm0112G540MSMPmFV01

Series drawing

All measurements are in mm.





Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | HFM Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	0.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

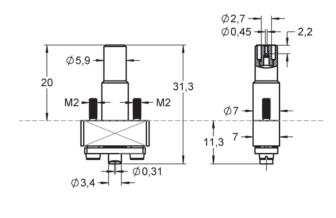
1034900	HF77HFMm0112	HF77HFMm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1105444 HF77HFMm0112G540MSMPmFV02

Series drawing

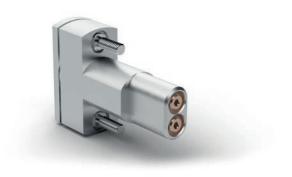
All measurements are in mm.





Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | HFM Male 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	0.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

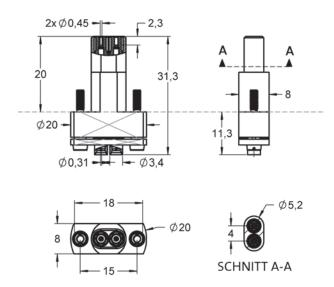
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1031897	FZWZ-001 Assembly tool		
Interface	mSMP Male	see page 128	

Order code Product name

1120793 HF77HFMm0212G1080MSMPmFV01

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | HFM Male 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	0.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

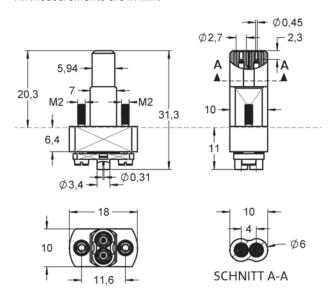
1034900	HF77HFMm0112	HF77HFMm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1057696 HF77HFMm0212G1080MSMPmFV02

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | HFM Male 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	0.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

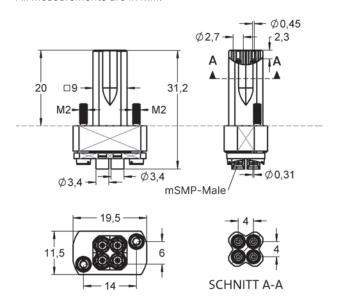
1034900	HF77HFMm0112	HF77HFMm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1034901 HF77HFMm0412G2160MSMPmF

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.37 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	40 dB	15 dB



HF77 12 GHz | MateAX Female 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

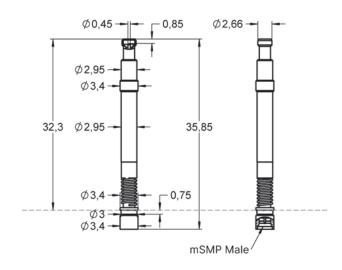
Interface	mSMP Male	see page 128
		3

Order code Product name

1056232 HF77MATEAXf0112G540MSMPmP

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Female 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

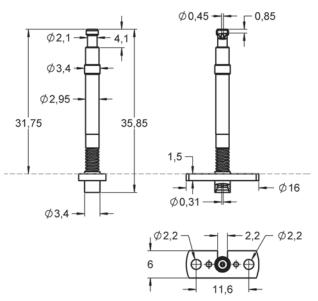
1056232	HF77MATEAXf01	HF77MATEAXf0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1142274 HF77MATEAXf0112G540MSMPmF

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



12 GHz | MateAX Female 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

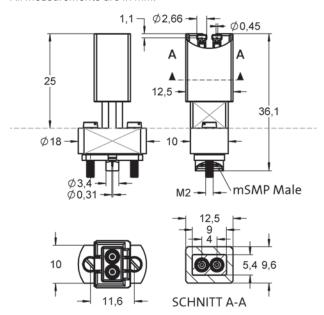
1056232	HF77MATEAXf01	HF77MATEAXf0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1112868 HF77MATEAXf0212G1080MSMPmF

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



12 GHz | MateAX Female 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring Signal	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

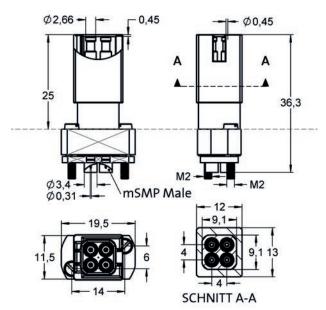
1056232	HF77MATEAXf01	HF77MATEAXf0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1051198 HF77MATEAXf0412G2160MSMPmF

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

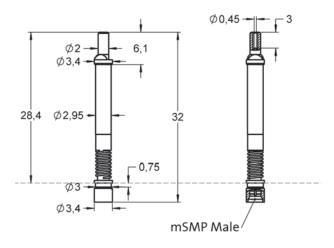
Interface	mSMP Male	see page 128

Order code Product name

1035527 HF77MATEAXm0112G540MSMPmP

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°
Current Internal [A]	0.1
Current Circular [A]	0.5
Impedance [Ohm]	50
Frequency [GHz]	12

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

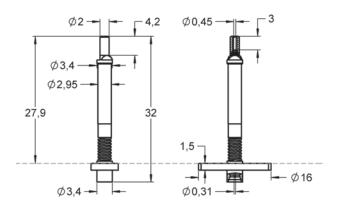
1035527	HF77MATEAXm0	HF77MATEAXm0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

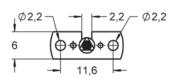
Order code Product name

1036172 HF77MATEAXm0112G540MSMPmFV01

Series drawing

All measurements are in mm.





Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

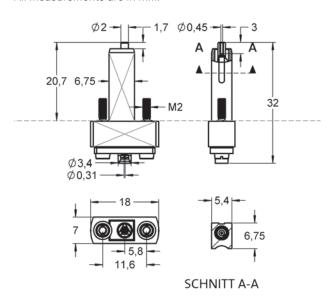
1035527	HF77MATEAXm0	HF77MATEAXm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1116970 HF77MATEAXm0112G540MSMPmFV02

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Male 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	2x Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

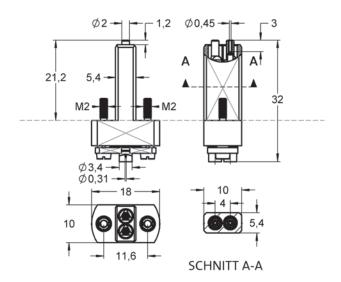
1035527	HF77MATEAXm0	HF77MATEAXm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1142276 HF77MATEAXm0212G1080MSMPmF

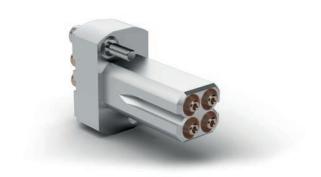
Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 12 GHz | MateAX Male 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	4x Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

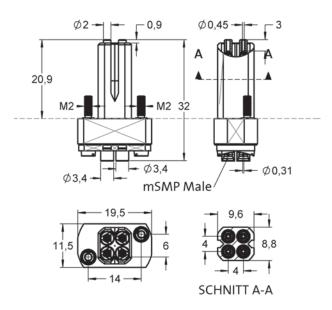
1035527	HF77MATEAXm0	HF77MATEAXm0112G540MSMPmP		
1031897	FZWZ-001	FZWZ-001 Assembly tool		
Interface	mSMP Male	see page 128		

Order code Product name

1035528 HF77MATEAXm0412G2160MSMPmF

Series drawing

All measurements are in mm.



Radio Frequency perfomance

Typical insertion loss	DC up to 6 GHz	6 GHz up to 12 GHz
Maximum	0.15 dB	0.38 dB
Typical return loss	DC up to 6 GHz	6 GHz up to 12 GHz
Minimum	35 dB	10 dB



HF77 1 GHz | MateNet Male

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	1	
Current Circular [A]	1	
Impedance [Ohm]	100	
Frequency [GHz]	1	

Mechanical specifications

	2x Signal	1x Ground
Preload (cN)	130	470
Spring force at nt (cN ±20%)	195	630
Nominal travel (mm)	0.9	2.5
Maximum travel (mm)	1.2	3.5

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring Signal	Spring steel	gold plated
Spring GROUND	Spring steel	gold plated
Flange	Brass	nickel plated

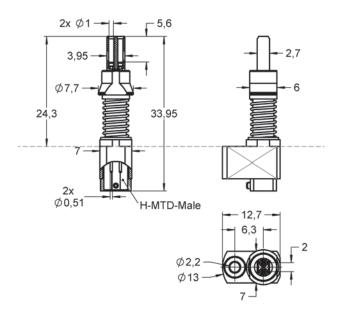
Accessories

1097776	F07706B100G195	Inner pin
1035933	FZWZ-005	Assembly tool
Interface	H-MTD Male	see page 128

Order code Product name

1097821 HF77MATENETm011G1020HMTDmFV01

Series drawing





HF77 12 GHz | SMK miniFakra Male 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	nickel plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

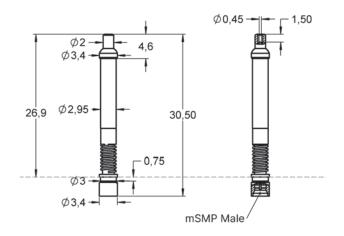
Accessories

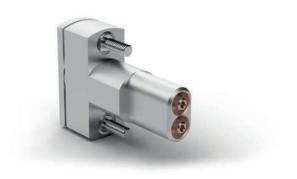
Interface	mSMP Male	see page 128
		, 0

Order code Product name

1134945 HF77SMKMINIFAKRAm0112G540MSMPmP

Series drawing





12 GHz | SMK miniFakra Male 2-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	2x Signal	Ground
Preload (cN)	95	280
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	1.4
Maximum travel (mm)	1.8	2.2

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	nickel plated
Spring Signal	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

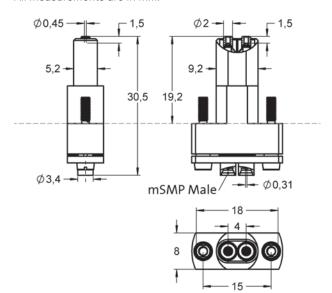
Accessories

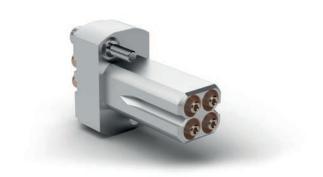
1134945	HF77SMKMINIFAKRAm0112G540MSMPmP		
1031897	FZWZ-001 Assembly tool		
Interface	mSMP Male	see page 128	

Order code Product name

1139613 HF77SMKMINIFAKRAm0212G1080MSMPmF

Series drawing





HF77 12 GHz | SMK mini Fakra Male 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	Ground
Preload (cN)	95	280
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	1.4
Maximum travel (mm)	1.8	2.2

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	nickel plated
Spring Signal	Spring steel	gold plated
Spring Ground	Stainless steel	unplated
Flange	Brass	nickel plated

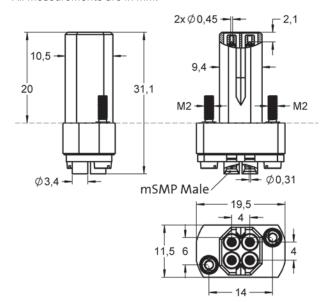
Accessories

1134945	HF77SMKMINIFA	HF77SMKMINIFAKRAm0112G540MSMPmP	
1031897	FZWZ-001	FZWZ-001 Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1134946 HF77SMKMINIFAKRAm0412G2160MSMPmF

Series drawing





HF77 12 GHz | KET miniFakra Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

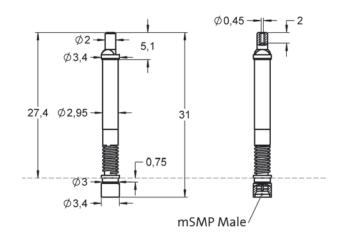
Accessories

Interfoce	ma CNAD Mala	100
Interface	mSMP Male	see page 128

Order code Product name

1109576 HF77KETMINIFAKRAm0112G540MSMPmP

Series drawing





HF77 12 GHz | KET miniFakra Male 1-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact SIGNAL	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring Signal	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

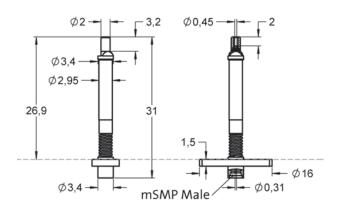
Accessories

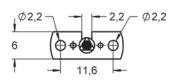
1109576	HF77KETMINIFAK	HF77KETMINIFAKRAm0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1141543 HF77KETMINIFAKRAm0112G540MSMPmF

Series drawing







HF77 12 GHz | KET miniFakra Male 4-fold

Electrical specifications

Temperature [°C]	-45°+100°	
Current Internal [A]	0.1	
Current Circular [A]	0.5	
Impedance [Ohm]	50	
Frequency [GHz]	12	

Mechanical specifications

	4x Signal	Ground
Preload (cN)	95	230
Spring force at nt (cN ±20%)	120	420
Nominal travel (mm)	0.5	2.0
Maximum travel (mm)	1.8	2.8

Materials and plating

Contact Signal	BeCu	gold plated
Contact Ground	BeCu	gold plated
Barrel	Brass	gold plated
Spring SIGNAL	Spring steel	gold plated
Spring GROUND	Stainless steel	unplated
Flange	Brass	nickel plated

Accessories

1109576	HF77KETMINIFAK	HF77KETMINIFAKRAm0112G540MSMPmP	
1031897	FZWZ-001	Assembly tool	
Interface	mSMP Male	see page 128	

Order code Product name

1109577 HF77KETMINIFAKRAm0412G1080MSMPmF

Series drawing

