Coaxial Adapters, Within (Conform to IEEE-Std-287)



1 mm	Up to 110 GHz
1.85 mm	Up to 65 GHz
2.4 mm	Up to 50 GHz
2.92 mm	Up to 40 GHz
3.5 mm	Up to 26.5 GHz

Coaxial Adapters, Between (Conform to IEEE-Std-287)



1.85 mm/1 mm	Up to 67 GHz
2.4 mm/1.85 mm	Up to 50 GHz
2.92 mm/1.85 mm	Up to 40 GHz
2.92 mm/2.4 mm	Up to 40 GHz
3.5 mm/2.4 mm	Up to 26.5 GHz

Panel Adapters, Front Access, Within (Conform to IEEE-Std-287)



1.85 mm Up to 65 GHz

2.92 mm Up to 40 GHz

Panel Adapters, Within (Conform to IEEE-Std-287)



1.85 mm Up to 65 GHz

Panel Adapters, Between (Conform to IEEE-Std-287 and MIL-std-348A)



1.85 mm/SMPM^(*) Up to 65 GHz

2.92 mm/SMPM^(*) Up to 40 GHz

(*) Compatible with "GPPO" and "Mini SMP"

SMA Panel Adapters, Within (Long-Life Model, Durability > 5,000 cycles)



Female/Female Up to 20 GHz

SMA Swept Adapters, Within (90 Degrees Angled-Swept)



Male/Female Up to 24.6 GHz

1 mm/1 mm

DC - 110 GHz, Coaxial Adapters, In-Series

DESCRIPTION

"KPC100MF, FF, and MM"

are small size, low SWR, and low loss coaxial adapters. They are designed for ultrabroadband (up to sub-millimeter wave) measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 110 GHz
SWR <1.3 (*), <1.5 (**)
Insertion Loss 0.5 dB (typ.)
Electrical Length 11.6 mm (Nominal)
Temperature Range -55 to +125 °C



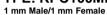
Body and Outer Conductor Gold Plated Stainless Steel

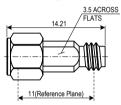
Inner Conductor Gold Plated Beryllium Copper and Brass

Coupling Torque 45 N-cm (Nominal)
Connect/Disconnect Life > 500 Cycles (Estimate)

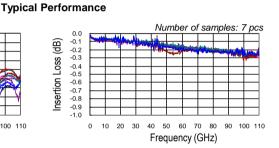


TYPE: KPC100MF



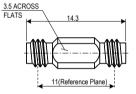


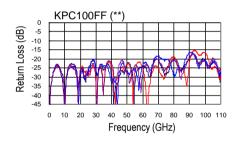
RPC100MF (*) SS -5 15 -10 -20 -35 -40 -45 0 10 20 30 40 50 60 70 80 90 100 11 Frequency (GHz)

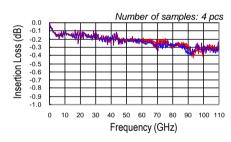


TYPE: KPC100FF

1 mm Female/1 mm Female

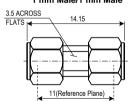


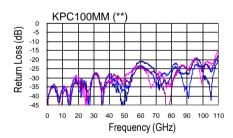


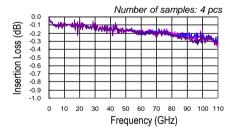


TYPE: KPC100MM

1 mm Male/1 mm Male





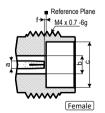


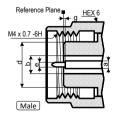
Interface Mating Dimensions of KPC100 (1 mm Connectors)

NOTE:

All dimensions are in millimeters.

- (*) Calibration as insertable-device
- (**) Calibration as non-insertable-device







RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

Rev. 04 July 2020



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1.85 mm/1.85 mm

DC - 65 GHz, Coaxial Adapters, In-Series

DESCRIPTION

"KPC185MF, FF, and MM"

are small size, low SWR, and low loss coaxial adapters. They are designed for broadband Insertion Loss

measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 65 GHz SWR < 1.3 < 0.35 dB

Electrical Length 17.5 mm (Nominal) Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor

Inner Conductor Coupling Torque Connect/Disconnect Life

S11 FORWARD REFLECTION

Passivated Stainless Steel

Gold Plated Beryllium Copper and Brass

90 N-cm (Nominal) > 1,000 Cycles

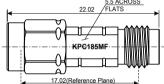


Production Status 2 Weeks Lead-Time for Shipping

Typical Performance

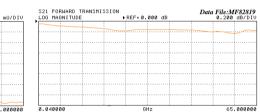
TYPE: KPC185MF

1.85 mm Male/1.85 mm Female



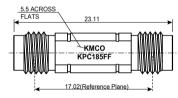
SWR

Insertion Loss



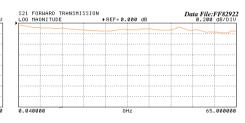
TYPE: KPC185FF

1.85 mm Female/1.85 mm Female



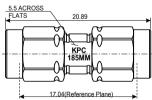


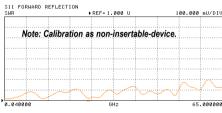
▶ REF= 1.000 U 100.000 mU/DIV

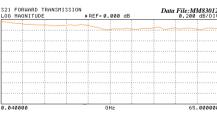


TYPE: KPC185MM

1.85 mm Male/1.85 mm Male



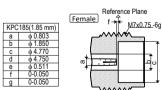


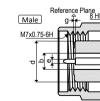


Interface Mating Dimensions of KPC185 (1.85 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.





RoHS Compliant

REACH Compliant

<*> Matable with 2.4 mm connectors

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2.4 mm/2.4 mm

DC - 50 GHz, Coaxial Adapters, In-Series

DESCRIPTION

"KPC240MF, FF, and MM"

are small size, low SWR, and low loss coaxial adapters.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 50 GHz Frequency Range SWR < 1.25

Insertion Loss < 0.3 dB

Electrical Length 17.5 mm (Nominal) -55 to +125 °C Temperature Range

Mechanical:

Body and Outer Conductor Passivated Stainless Steel

Gold Plated Beryllium Copper and Brass Inner Conductor

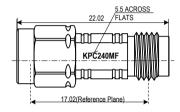
Coupling Torque 90 N-cm (Nominal) Connect/Disconnect Life > 1,000 Cycles



Production Status 2 Weeks Lead-Time for Shipping

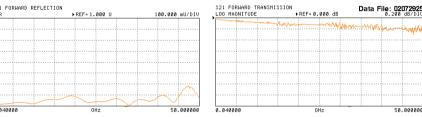
TYPE: KPC240MF

2.4 mm Male/2.4 mm Female



SWR

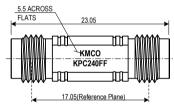
Insertion Loss

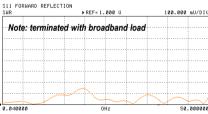


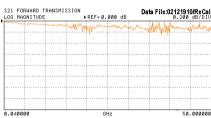
Typical Performance

TYPE: KPC240FF

2.4 mm Female/2.4 mm Female

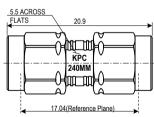


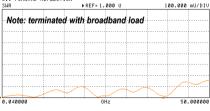


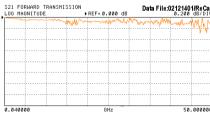


TYPE: KPC240MM

2.4 mm Male/2.4 mm Male

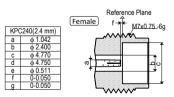




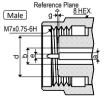


Interface Mating Dimensions of KPC240 (2.4 mm Connectors <*>)

All dimensions are in millimeters.



S11 FORWARD REFLECTION



RoHS Compliant

REACH Compliant

<*> Matable with 1.85 mm connectors

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2.92 mm/2.92 mm

DC - 40 GHz, Coaxial Adapters, In-Series

DESCRIPTION

"KPC292MF, FF, and MM"

are small size, low SWR, and low loss coaxial adapters.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 40 GHz Frequency Range < 1.15 (MF&MM) SWR < 1.20 (FF) Insertion Loss < 0.2 dB

17.5 mm (Nominal) Electrical Length Temperature Range -55 to +125 °C



Body and Outer Conductor Passivated Stainless Steel Inner Conductor

Coupling Torque Connect/Disconnect Life

Gold Plated Beryllium Copper and Brass

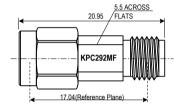
90 N-cm (Nominal) > 1,000 Cycles

Production Status 2 Weeks Lead-Time for Shipping

Typical Performance

TYPE: KPC292MF

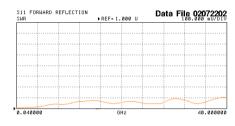
2.92 mm Male/2.92 mm Female



SWR

Insertion Loss

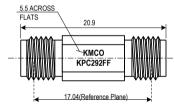
S21 FORWARD TRANSMISSION

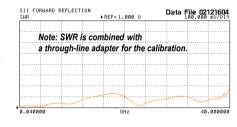




TYPE: KPC292FF

2.92 mm Female/2.92 mm Female

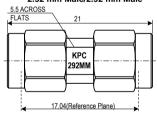


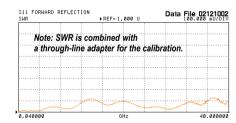


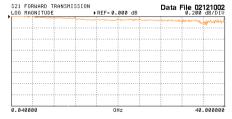


TYPE: KPC292MM

2.92 mm Male/2.92 mm Male







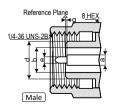
Interface Mating Dimensions of KPC292 (2.92 mm Connectors)

NOTE:

All dimensions are in millimeters.









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Rev. 03 June 2017



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3.5 mm/3.5 mm

DC - 26.5 GHz, Coaxial Adapters, In-Series

DESCRIPTION

"KPC350MF, FF, and MM"

are small size, low SWR, and low loss coaxial adapters.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 26.5 GHz (Moding: 34 GHz) Frequency Range

SWR < 1.15 Insertion Loss < 0.2 dB

Electrical Length 17.5 mm (Nominal) -55 to +125 °C Temperature Range

Mechanical:

Body and Outer Conductor Passivated Stainless Steel

Inner Conductor Gold Plated Beryllium Copper and Brass

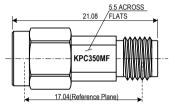
Coupling Torque 90 N-cm (Nominal) Connect/Disconnect Life > 1,000 Cycles



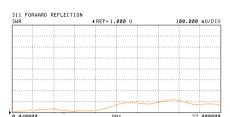
Production Status 2 Weeks Lead-Time for Shipping

TYPE: KPC350MF

3.5 mm Male/3.5 mm Female

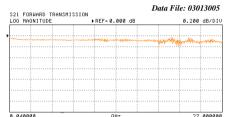


SWR



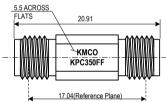
Typical Performance

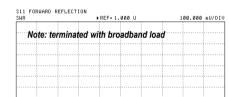
Insertion Loss

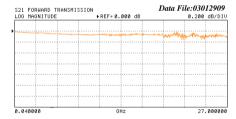


TYPE: KPC350FF

3.5 mm Female/3.5 mm Female

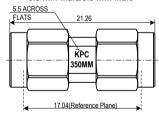


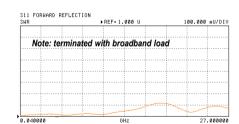


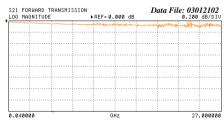


TYPE: KPC350MM

3.5 mm Male/3.5 mm Male



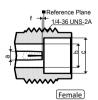


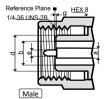


Interface Mating Dimensions of KPC350 (3.5 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.







RoHS Compliant

REACH Compliant

<*> Matable with 2.92 mm connectors and SMA

Specifications Subject to Change Without Notice

Rev. 03 June 2017



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1.85 mm/1 mm

DC - 67 GHz, Coaxial Adapters, Between-Series

DESCRIPTION

"KPC185F100F, KPC185F100M, KPC185M100F, and KPC185M100M"

coaxial adapters between 1.85 mm and 1.00 mm are small size, low SWR, and low loss.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 67 GHz

SWR < 1.4 ⁽¹⁾
Insertion Loss 0.8 dB (typ.) ⁽¹⁾

Electrical Length 14.6 mm (Nominal)

Temperature Range -55 to +125 °C



Mechanical:

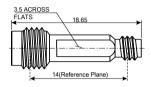
Body and Outer Conductor Gold Plated Stainless Steel

Inner Conductor Gold Plated Beryllium Copper and Brass

Coupling Torque 90 N-cm for KPC185 (Nominal) 45 N-cm for KPC100 (Nominal)

Connect/Disconnect Life > 500 Cycles (Estimate)

TYPE: KPC185F100F

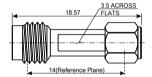


Performance Test Configuration VNA with Millimeter Wave Modules Port 1 1 mm 1.85/1.85 mm 1 mm

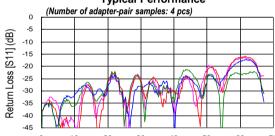
(Adapter Pair: Insertable-Device)

TYPE: KPC185F100M

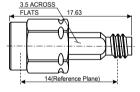
1.85 mm Female/1 mm Male

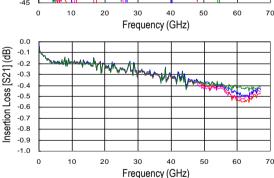


Typical Performance



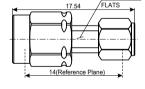
TYPE: KPC185M100F 1.85 mm Male/1 mm Female





TYPE: KPC185M100M

1.85 mm Male/1 mm Male



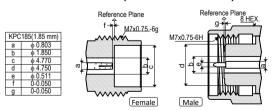
3.5 ACROSS

RoHS Compliant

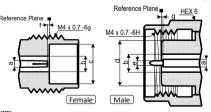
REACH Compliant

Interface Mating Dimensions

KPC185 (1.85 mm Connectors)



KPC100 (1 mm Connectors)



KP	C100(1 mm)
а	ф 0.434
b	ф 1.000
С	ф 2.390
d	ф 2.358
е	ф 0.250
f	0-0.013
g	0-0.013

NOTE:

All dimensions are in millimeters.

 $(1)\ 1$ mm ports were measured for the measurement of return and insertion loss of the adapters with 1.8 mm ports mated as an interface.

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Rev. 04 July 2020



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2.4 mm/1.85 mm

DC - 50 GHz, Coaxial Adapters, Between-Series

DESCRIPTION

"KPC240F185F, KPC240F185M, KPC240M185F, and KPC240M185M"

coaxial adapters between 2.4 mm and 1.85 mm are small size, low SWR, and low loss.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 50 GHz Frequency Range SWR < 1.25 (*) < 0.4 dB (**) Insertion Loss Electrical Length 17.5 mm (Nominal) Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor Passivated Stainless Steel Inner Conductor Gold Plated Beryllium

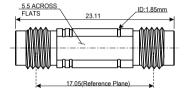
Copper and Brass

Coupling Torque 90 N-cm (Nominal) Connect/Disconnect Life > 1,000 Cycles

Production Status 2 Weeks Lead-Time for Shipping

TYPE: KPC240F185F

2.4 mm Female/1.85 mm Female



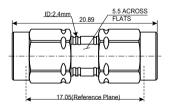
TYPE: KPC240F185M 2.4 mm Female/1.85 mm Male

17.05(Reference Plane)

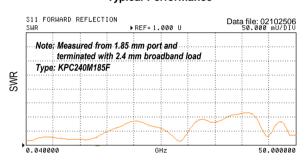
TYPE: KPC240M185F 2.4 mm Male/1.85 mm Female

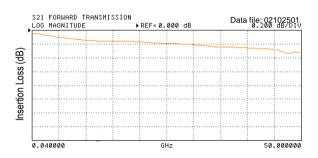
5.5 ACROSS FLATS 17.05(Reference Plane)

TYPE: KPC240M185M 2.4 mm Male/1.85 mm Male

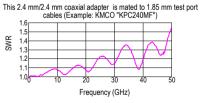


Typical Performance





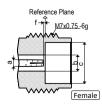
These adapters are designed to eliminate SWR degradation as shown in the below chart.



Interface Mating Dimensions of KPC240 (2.4 mm Connectors) and KPC185 (1.85 mm Connectors)

NOTE:

All dimensions are in millimeters



Refer	renci	e Plane 8 HEX.
M <u>7x0.75-6H</u>	7	
5 d o	4	
Male	<u> </u>	

KDC	2240/2.4 mm\
	240(2.4 mm)
а	ф 1.042
b	ф 2.400
С	ф 4.770
d	ф 4.750
е	φ 0.511
f	0-0.050
g	0-0.050

KPC	185(1.85 mm)
а	ф 0.803
b	ф 1.850
С	ф 4.770
d	ф 4.750
е	φ 0.511
f	0-0.050
a	0-0.050

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

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2.92 mm/1.85 mm

DC - 40 GHz, Coaxial Adapters, Between-Series

DESCRIPTION

"KPC292F185F, KPC292F185M, KPC292M185F, and KPC292M185M"

coaxial adapters between 2.92 mm and 1.85 mm are small size, low SWR, and low loss.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 40 GHz SWR < 1.3

Insertion Loss < 0.35 dB

Electrical Length 17.5 mm (Nominal)
Temperature Range -55 to +125 °C



Body and Outer Conductor Passivated Stainless Steel Inner Conductor Gold Plated Beryllium

Copper and Brass

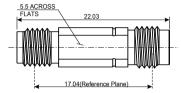
Coupling Torque 90 N-cm (Nominal)
Connect/Disconnect Life > 1,000 Cycles



Production Status 2 Weeks Lead-Time for Shipping

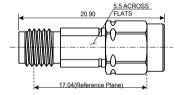
TYPE: KPC292F185F

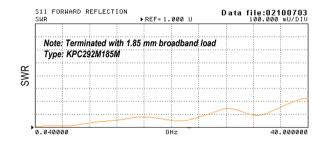
2.92 mm Female/1.85 mm Female



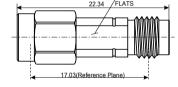
Typical Performance

TYPE: KPC292F185M

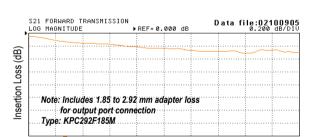




TYPE: KPC292M185F

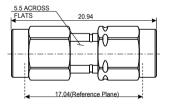


5.5 ACROSS



TYPE: KPC292M185M

2.92 mm Male/1.85 mm Male

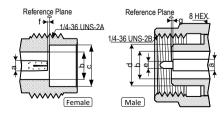


RoHS Compliant

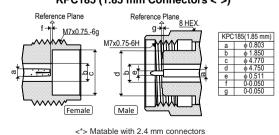
REACH Compliant

Interface Mating Dimensions

KPC292 (2.92 mm Connectors)



KPC185 (1.85 mm Connectors <*>)



Specifications Subject to Change Without Notice

Rev. 03 June 2017



All dimensions are in millimeters

NOTE:

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2.92 mm/2.4 mm

DC - 40 GHz, Coaxial Adapters, Between-Series

DESCRIPTION

"KPC292F240F, KPC292F240M, KPC292M240F, and KPC292M240M"

coaxial adapters between 2.92 mm and 2.4 mm are small size, low SWR, and low loss

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 40 GHz Frequency Range SWR < 1.22 Insertion Loss < 0.25 dB Electrical Length 17.5 mm (Nominal) Temperature Range -55 to +125 °C

Mechanical:

Inner Conductor

Coupling Torque Connect/Disconnect Life

Body and Outer Conductor Passivated Stainless Steel Gold Plated Beryllium Copper and Brass 90 N-cm (Nominal)

S11 FORWARD REFLECTION

0.040000

> 1,000 Cycles



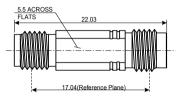
Production Status 2 Weeks Lead-Time for Shipping

Data File 02122205

40.000000

TYPE: KPC292F240F

2.92 mm Female/2.4 mm Female

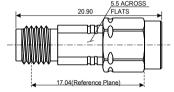


Typical Performance

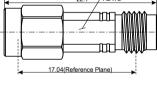
Note: Terminated with 2.4 mm broadband load Type: KPC292M240F SWR

TYPE: KPC292F240M

2.92 mm Female/2.4 mm Male



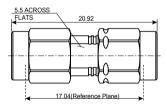
TYPE: KPC292M240F

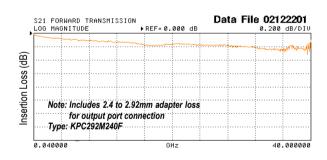


2.92 mm Male/2.4 mm Female

5.5 ACROSS FLATS

TYPE: KPC292M240M 2.92 mm Male/2.4 mm Male





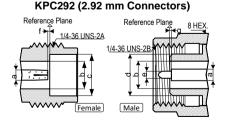
GHz

RoHS Compliant

REACH Compliant

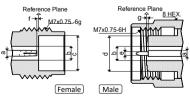


All dimensions are in millimeters.



Interface Mating Dimensions

KPC240 (2.4 mm Connectors)



KPC	KPC240(2.4 mm)	
а	ф 1.042	
b	ф 2.400	
С	ф 4.770	
d	ф 4.750	
е	φ 0.511	
f	0-0.050	
g	0-0.050	

I/D0040/0.4 -----\

Specifications Subject to Change Without Notice

Rev. 03 June 2017



3.5 mm/2.4 mm

DC - 26.5 GHz, Coaxial Adapters, Between-Series

DESCRIPTION

"KPC350F240F, KPC350F240M, KPC350M240F, and KPC350M240M"

coaxial adapters between 3.5 mm and 2.4 mm are small size, low SWR, and low loss

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 26.5 GHz (Moding: 34GHz)

SWR < 1.2 Insertion Loss < 0.3 dB

Electrical Length 17.5 mm (Nominal) Temperature Range -55 to +125 °C

Mechanical:

Coupling Torque

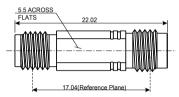
Body and Outer Conductor Passivated Stainless Steel

Inner Conductor Gold Plated Beryllium

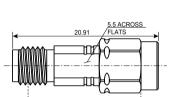
Copper and Brass 90 N-cm (Nominal) Connect/Disconnect Life > 1,000 Cycles

Production Status 2 Weeks Lead-Time for Shipping

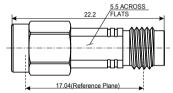
TYPE: KPC350F240F 3.5 mm Female/2.4 mm Female



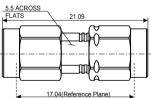
TYPE: KPC350F240M 3.5 mm Female/2.4 mm Male



TYPE: KPC350M240F 3.5 mm Male/2.4 mm Female

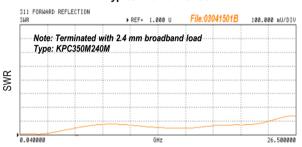


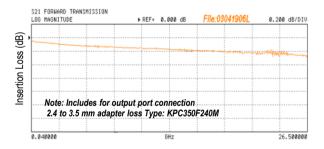
TYPE: KPC350M240M 3.5 mm Male/2.4 mm Male



KPC350 (3.5 mm Connectors)

Typical Performance





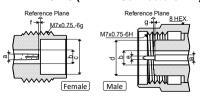
RoHS Compliant

REACH Compliant

		`	,
(P(C350(3.5 mm)	Reference Plane	Reference Plane 8 HEX
3	ф 1.520	1/4-36 UNS-2A	90400
)	ф 3.500		1/4-36 UNS-2B
;	ф 4.640	. (↑ <u> </u>
j	ф 4.580	*\\tag{1}	4 J # ####
•	ф 0.920	a ∏∷≑ ∃ 40	79 % 118
f	0-0.050	⁺ /	↓ * .
]	0-0.050		יו וועוגלעעען
		Female	Male Male

Interface Mating Dimensions

KPC240 (2.4 mm Connectors <*>)



b	ф 2.400
С	ф 4.770
d	ф 4.750
е	φ 0.511
f	0-0.050
g	0-0.050

KPC240(2.4 mm)

a φ 1.042

NOTE:

All dimensions are in millimeters.

<*> Matable with 1.85 mm connectors

Specifications Subject to Change Without Notice

Rev. 03 June 2017



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1.85 mm/1.85 mm Panel Adapter, In-Series

DC - 65 GHz, Coaxial Panel Adapters for Front Access Ports

DESCRIPTION

"KPC185MF FPA" coaxial front panel adapter is easy to mate, low SWR, and low insertion loss. It is designed for frequently connected/disconnected broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 65 GHz

SWR < 1.3 Insertion Loss < 0.5 dB

Electrical Length Shown below (Nominal)

Temperature Range -55 to +125 °C

Mechanical:

Body Passivated Stainless Steel (*)
Outer Conductor Gold Plated Stainless Steel
Inner Conductor Gold Plated Beryllium Copper
Coupling Torque 90 N-cm (Nominal)

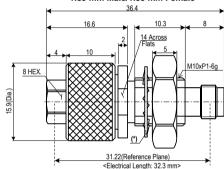
Coupling Torque 90 N-cm (Nomina Connect/Disconnect Life > 1,000 Cycles



Production Status 3 Weeks Lead-Time for Shipping

TYPE: KPC185MF FPA

1.85 mm Male/1.85 mm Female





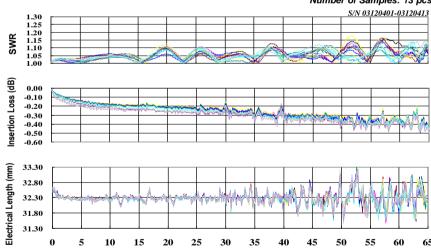
Mounting Hole and Thickness (Recommended)



Thickness: 2 to 5.4 mm

Typical Performance

Number of Samples: 13 pcs



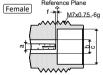
Interface Mating Dimensions of KPC185MF FPA (1.85 mm Connectors <*>)

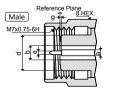
NOTE:

All dimensions are in millimeters.

(*)Toothed lockwasher is nickel-plated steel.







Reach Compliant

<*> Matable with 2.4 mm connectors

Specifications Subject to Change Without Notice

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DC - 40 GHz, Coaxial Panel Adapters for Front Access Ports

DESCRIPTION

"KPC292MF FPA" coaxial front panel adapter is easy to mate, good return loss, and low insertion loss. It is designed for frequently connected/disconnected broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 40 GHz Frequency Range **SWR** < 1.15 < 0.3 dB Insertion Loss

Electrical Length Shown below (Nominal)

Temperature Range -55 to +125 °C

Mechanical:

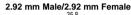
Body Passivated Stainless Steel (*) Outer Conductor Gold Plated Stainless Steel Gold Plated Beryllium Copper Inner Conductor

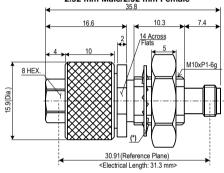
90 N-cm (Nominal) Coupling Torque Connect/Disconnect Life > 1,000 Cycles



Production Status 3 Weeks Lead-Time for Shipping

TYPE: KPC292MF FPA





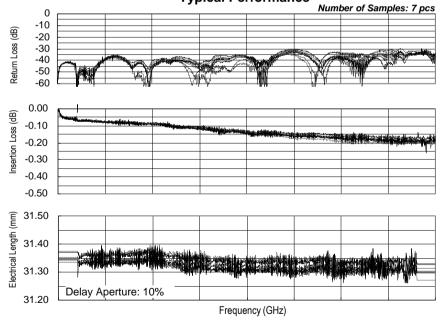


Mounting Hole and Thickness (Recommended)



Thickness: 2 to 5.4 mm

Typical Performance

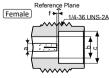


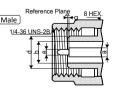
Interface Mating Dimensions of KPC292MF FPA (2.92 mm Connectors <*>)

NOTE:

All dimensions are in millimeters. (*)Toothed lockwasher is nickel-plated steel.







RoHS Compliant

REACH Compliant

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Rev. 03 June 2017



1.85 mm for DC - 65 GHz, 2.92 mm for 40 GHz Coaxial Panel Adapters

DESCRIPTION

"KPC185FFPA and

KPC292FFPA" coaxial panel adapters are 9.5 mm "D"-holed panel mountable, low SWR, and low loss.

They are designed for broadband measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

DC - 65 GHz (1.85 mm) Frequency Range DC - 40 GHz (2.92 mm)

< 1.3 (1.85 mm) SWR < 1.15 (2.92 mm)

< 0.4 dB (1.85 mm) Insertion Loss

< 0.25 dB (2.92 mm) **Electrical Length** Shown below (Nominal) Temperature Range -55 to +125 °C



Mechanical:

Passivated Stainless Steel (*) Body

Passivated Stainless Steel (1.85 mm) (*) Outer Conductor Gold Plated Stainless Steel (2.92 mm)

Gold Plated Beryllium Copper and Brass (1.85 mm)

Inner Conductor Gold Plated Beryllium Copper (2.92 mm)

90 N-cm (Nominal) Coupling Torque

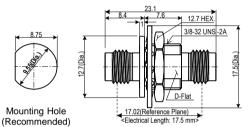
Connect/Disconnect Life > 1,000 Cycles

Production Status

2 Weeks Lead-Time for Shipping

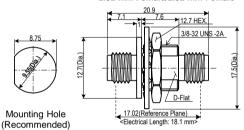
TYPE: KPC185FFPA

1.85 mm Female/1.85 mm Female



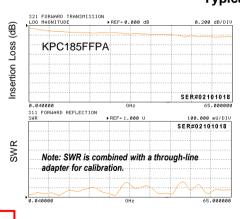
TYPE: KPC292FFPA

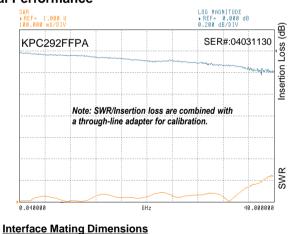
2.92 mm Female/2.92 mm Female



Typical Performance

Mounting Hole





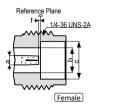
RoHS Compliant

REACH Compliant

KPC185 (1.85 mm Connectors <*>)

			Refer f →	ence Plan M7x0	
KPC	185(1.85 mm)			~~	
а	ф 0.803				1
b	ф 1.850	1 1			lī
С	ф 4.770	ا ل			-
d	ф 4.750				ചഠ
е	ф 0.511	1			⊢ + ∣
f	0-0.050				
g	0-0.050		L		_
			VVVV	/VV	
				Fem:	ale

KPC292 (2.92 mm Connectors)



KDC	292(2.92 mm)
a	ф 1.270
b	ф 2.920
С	ф 4.640
d	ф 4.580
е	ф 0.920
f	0-0.050
g	0-0.050

NOTE:

All dimensions are in millimeters.

(*)Toothed lockwasher is chromate-converted

<*> Matable with 2.4 mm connectors

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DC - 65 GHz/40 GHz Panel Adapters, Between

1.85 mm/SMPM and 2.92 mm/SMPM Panel Adapters

DESCRIPTION

"KPC185F-SMPM-FD-PA and

"KPC292F-SMPM-FD-PA" coaxial panel adapters are 9.5 mm "D"-holed panel mountable, low SWR, and low loss.

They are designed for broadband measurement, instrument, and system applications.

Connector Interfaces

- 1.85 mm and 2.92 mm connectors conform to IEEE-Std-287.
- SMPM male full detent interface is as per MIL-STD-348A 328.2.

SPECIFICATIONS

Electrical:

DC - 65 GHz (1.85 mm) DC - 65 GHz (1.85 mm)
DC - 40 GHz (2.92 mm) Frequency Range

SWR < 1.5 Insertion Loss < 0.7 dB -55 to +125 °C Temperature Range

Mechanical:

Body and Outer Conductor Passivated Stainless Steel (*)

Inner Conductor Gold Plated Beryllium Copper and Brass

90 N-cm (Nominal) Coupling Torque

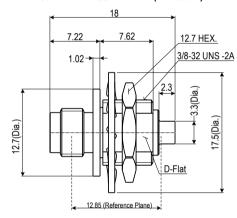
Connect/Disconnect Life > 100 Cycles (Estimate for SMPM)



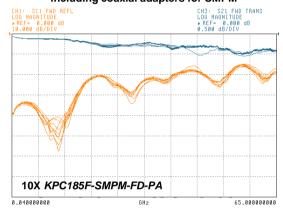
Production Status 2 Weeks Lead-Time for Shipping

TYPE: KPC185F-SMPM-FD-PA

1.85 mm Female/SMPM-Male (Full detent)

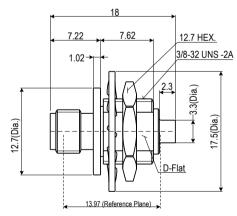


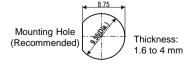
Typical Performance including coaxial adapters for SMPM

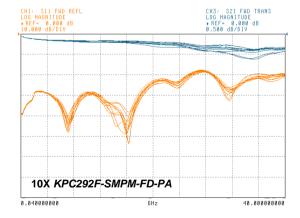


TYPE: KPC292F-SMPM-FD-PA

2.92 mm Female/SMPM-Male (Full detent)







All dimensions are in millimeters.

(*) Toothed lockwasher is chromate-converted zinc-plated steel.

RoHS Compliant REACH Compliant

Specifications Subject to Change Without Notice

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e-mail: sales@kmco.co.jp

DC - 20 GHz Panel Adapter, In-Series

SMA Coaxial Panel Adapters

DESCRIPTION

"SMA-FFPA" coaxial panel adapter is 9.5 mm "D"-holed panel mountable. It is designed for telecommunication systems and test equipment.

Connector Interface Standard:

- MIL-C-39012
- MIL-STD-348A
- IEC Std-169-15

SPECIFICATIONS

Electrical:

Frequency Range **SWR** Insertion Loss Input Power Temperature Range

DC - 20 GHz (*) < 1.2 < 0.1 dB 10 W (max) -55 to +85 °C



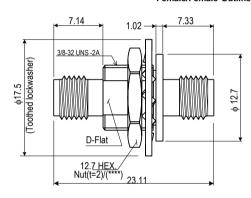
Mechanical:

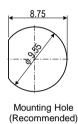
Outer Conductor Inner Conductor Coupling Torque Connect/Disconnect Life

Passivated Stainless Steel (**) Gold Plated Beryllium Copper 56 N-cm (Nominal) > 5,000 Cycles (***)

TYPE: SMA-FFPA

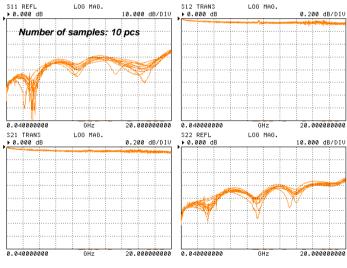
Female/Female Outline





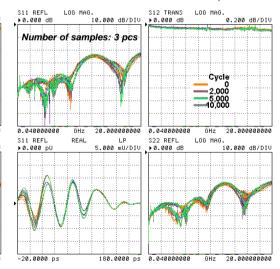
RF Performance

("Non-Insertable Device" Calibration)



Connect/Disconnect Life

("Non-Insertable Device" Calibration with Time Domain Measurement)



NOTE:

All dimensions are in millimeters.

- (*) Moding frequency: 24.7 GHz (theoretically)
- (**) Toothed lockwasher is chromate (trivalent) converted zinc-plated steel
- (***) Connect/disconnect speed: 10 cycles per minute (conforms to MIL-C-39012/60)

(****) Recommended tightening torque: 300 to 420 N-cm

RoHS Compliant REACH Compliant

Specifications Subject to Change Without Notice

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SMA Coaxial Adapters

DESCRIPTION

"SMA-525S" 90 degree angledswept adapter is designed for telecommunication systems and test equipment.

Connector Interface Standard:

- MIL-C-39012
- MIL-STD-348A
- IEC Std-169-15

SPECIFICATIONS

Electrical:

Frequency Range DC - 24.6 GHz (*) < 1.25 (to 20 GHz) SWR < 1.5 (to 24.6 GHz)

< 0.15 dB (to 20 GHz) Insertion Loss < 0.23 dB (to 24.6 GHz) Input Power 10 W (max) -55 to +85 °C Temperature Range

Mechanical:

Outer Conductor Inner Conductor Coupling Torque Connect/Disconnect Life

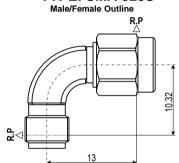
Nickel Plated Stainless Steel Gold Plated Beryllium Copper 56 N-cm (Nominal)

> 500 Cycles (**)



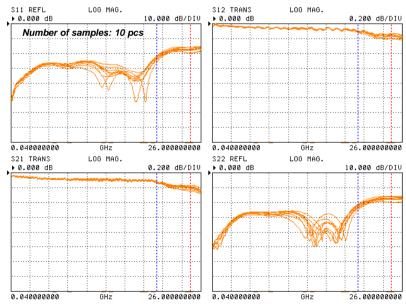
Production Status 2 Weeks Lead-Time for Shipping

TYPE: SMA-525S



RF Performance

("Insertable Device" Calibration in 3.5 mm System)



All dimensions are in millimeters.

(*) Moding frequency: 24.7 GHz (theoretically)

(**) Connect/disconnect speed: 10 cycles per minute (conforms to MIL-C-39012/60)

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

Rev. 03 June 2017



214-0031 川崎市多摩区東生田1-3-5 Tel: 044-911-7073 Fax: 044-911-9621 https://kmco.co.jp/ E-mail: sales-j@kmco.co.jp

Coaxial Hermetic Adapters, Within (Conform to IEEE-Std-287)



1.85 mm Up to 65 GHz



2.92 mm Up to 40 GHz

DC - 65 GHz, Hermetically Sealed, Coaxial Adapters

DESCRIPTION

"KPC185FFHA" is hermetically sealed 1.85 mm to 1.85 mm coaxial adapter that is:

- -Low SWR and low loss
- -Hermetic RF interface between vacuum and atmosphere environment
- -Small mounting space It is designed for broadband devices, instrument, and component testing applications.

SPECIFICATIONS

Electrical:

DC - 65 GHz Frequency Range **SWR** < 1.5 Insertion Loss < 0.7 dB

Electrical Length Shown below (Nominal)

Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor

Inner Conductor

Inner and Outer Conductor for Seal

Insulator for Seal Gasket for Flange Seal

Coupling Torque Connect/Disconnect Life

> 1,000 Cycles

Gold Plated Fe/Ni/Co Alloy (KOVAR) **Production Status**

4 Weeks Lead-Time for Shipping

< 1x10⁻¹⁰ Pam³/sec (< 1x10⁻⁹ atm cc /sec) He Leak Rate (*)

Gold Plated Stainless Steel

#7070 Glass (Corning)

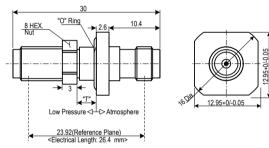
90 N-cm (Nominal)

Fluoroelastomer "O" Ring

Gold Plated Beryllium Copper

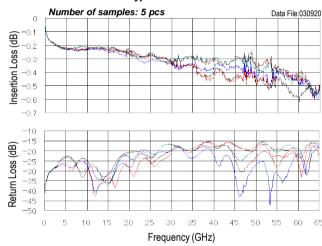
TYPE: KPC185FFHA

1.85 mm Female/1.85 mm Female

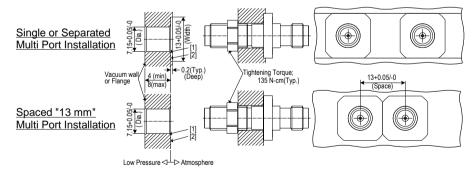


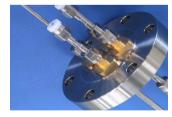
"T" · Vacuum wall or flange thickness: 4 mm (min) to 8 mm (max)

Typical Performance



Recommended Mounting Hole and Installation





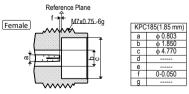
Example of 4 Adapters Mounted to 70 mm diameter. Vacuum Flange

Interface Mating Dimensions of KPC185 (1.85 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.

- [1] Corners: < 0.05 x 0.05 mm
- [2] "Smooth surface" required
- (*) As Per MIL-STD-883E, METHOD1014.10, Test Condition A4



<*> Matable with 2.4 mm connectors

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

Rev. 03 June 2017



Kawashima Manufacturing Co., Ltd.

DC - 40 GHz, Hermetically Sealed, Coaxial Adapters

DESCRIPTION

"KPC292FFHA" is hermetically sealed 2.92 mm to 2.92 mm coaxial adapter that is;

- -Low SWR and low loss
- -Hermetic RF interface between vacuum and atmosphere environment
- -Small mounting space It is designed for broadband devices, instrument, and component testing applications.

SPECIFICATIONS

Electrical:

Frequency Range DC - 40 GHz
SWR < 1.5
Insertion Loss < 0.45 dB
Electrical Length Below (Nominal)
Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor

Inner Conductor

Inner and Outer Conductor for Seal

Insulator for Seal Gasket for Flange Seal

Coupling Torque
Connect/Disconnect Life

He Leak Rate (*)

Gold Plated Stainless Steel and Brass

Gold Plated Beryllium Copper

Gold Plated Fe/Ni/Co Alloy (KOVAR)

#7070 Glass (Corning)
Fluoroelastomer "O" Ring
90 N-cm (Nominal)

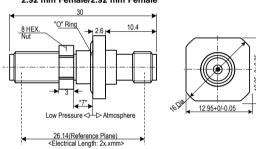
> 1,000 Cycles

< 1x10⁻¹⁰ Pam³/sec (< 1x10⁻⁹ atm cc /sec)



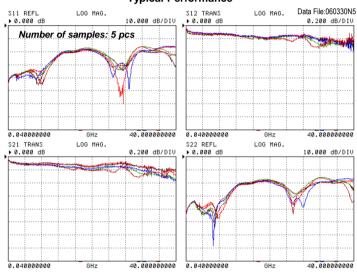
Production Status 4 Weeks Lead-Time for Shipping

TYPE: KPC292FFHA 2.92 mm Female/2.92 mm Female

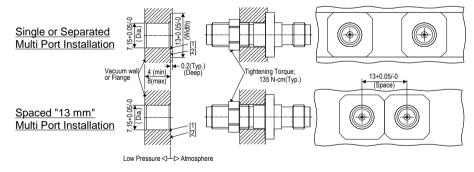


"T" : Vacuum wall or flange thickness: 4 mm (min) to 8 mm (max)

Typical Performance



Recommended Mounting Hole and Installation



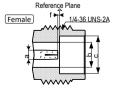


Interface Mating Dimensions of KPC292 (2.92 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.

- [1] Chamfer: < 0.05 mm
- [2] "Smooth surface" required
- (*) As Per MIL-STD-883E, METHOD1014.10, Test Condition A4



КРС292(2.92 mm) а ф 1.270 b ф 2.920 с ф 4.640 d -----f 0-0.050

<*> Matable with 3.5 mm and SMA

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

Rev. 03 June 2017



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2-Hole Flange Launchers (Conform to IEEE-Std-287)



1 mm Up to 110 GHz



1.85 mm Up to 65 GHz



2.92 mm Up to 40 GHz

1 mm

DC - 110 GHz, Flange Launchers

DESCRIPTION

"KPC100F311 and KPC100M311"

flange launchers are designed for ultrabroadband devices and units with coaxial I/O interfaces.

SPECIFICATIONS

Electrical:

Frequency Range DC - 110 GHz
SWR < 1.5 (*)
Insertion Loss 1 dB (typ.) (*)
Electrical Length 11.1 mm (Nominal)
Temperature Range -55 to +125 °C



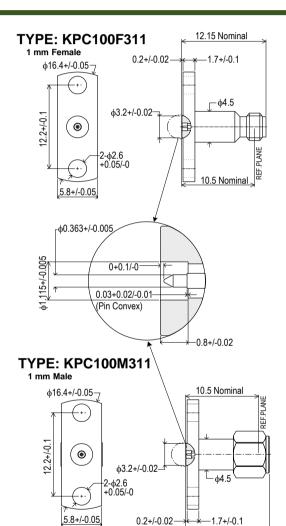
Mechanical:

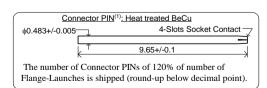
Body and Outer Conductor Gold Plated Stainless Steel

Inner Conductor Gold Plated Beryllium Copper and Brass

Coupling Torque 45 N-cm (Nominal)

Connect/Disconnect Life > 500 Cycles (Estimate)

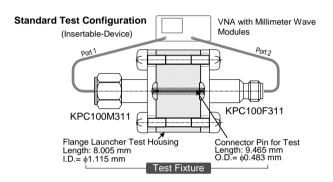


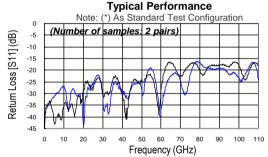


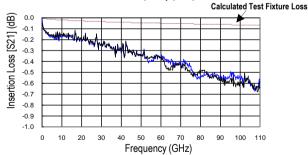
NOTE:

All dimensions are in millimeters.

(1) The tip of the pin contacts with "pin convex" in a final assembly.







Interface Mating Dimensions of KPC100 (1 mm Connectors)

Reference Plane

M4 x 0.7 -6H

RoHS Compliant

REACH Compliant

| RPC100(1 mm) | a | φ 0.434 | b | φ 1.000 | c | φ 2.390 | d | φ 2.358 | e | φ 0.250 | f | 0-0.013 | g | 0-0.013 |

Specifications Subject to Change Without Notice

Rev. 05 July 2020



12.06 Nominal

DC - 65 GHz, Two-Hole Flange Launchers & Glass Beads

DESCRIPTION

"KPC185M302 and KPC185F302" two-hole flange launchers and "GB185" glass beads are designed for broadband devices and units with coaxial I/O interfaces.

SPECIFICATIONS

Connectors Electrical:

DC - 65 GHz Frequency Range **SWR** < 1.5 (*) Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor Passivated Stainless Steel Gold Plated Beryllium

Inner Conductor Copper and Brass 90 N-cm (Nominal)

Connect/Disconnect Life > 1,000 Cycles

Coupling Torque

Glass Bead Electrical:

DC - 65 GHz Frequency Range Temperature Range -55 to +125 °C

Mechanical:

Body and Inner Conductor Gold Plated (**) Fe/Ni/Co

Allov (KOVAR)

Insulator #7070 Glass (Corning)

Others:

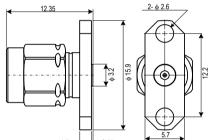
330°C (max) Soldering Temperature < 1x10⁻¹⁰ Pam³/sec He Leak Rate



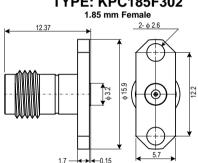
Production Status 2 Weeks Lead-Time for Shipping

TYPE: KPC185M302



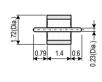


TYPE: KPC185F302

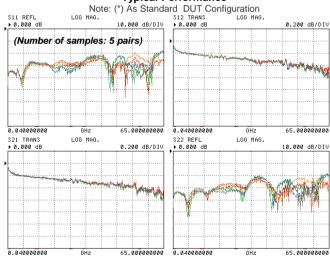


TYPE: GB185

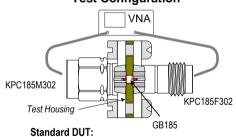
Glass Bead



Typical Performance



Test Configuration



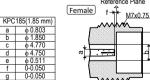
Cascaded KPC185M302, GB185, and KPC185F302

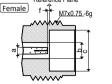
Interface Mating Dimensions of KPC185 (1.85 mm Connectors <*>)

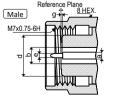
NOTE:

All dimensions are in millimeters.

(**) Thermo-sonic wire bondable gold plating







RoHS Compliant REACH Compliant

<*> Matable with 2.4 mm connectors

Rev. 03 June 2017

Specifications Subject to Change Without Notice

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DC - 40 GHz, Two-Hole Flange Launchers & Glass Beads

DESCRIPTION

"KPC292F302" two-hole flange launchers and "GB292" glass beads are designed for broadband devices and units with coaxial I/O interfaces.

SPECIFICATIONS

Connectors **Electrical:**

Frequency Range DC - 40 GHz **SWR** < 1.5 (*) Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor Passivated Stainless Steel Gold Plated Beryllium Inner Conductor Copper and Brass

Coupling Torque 90 N-cm (Nominal) > 1,000 Cycles Connect/Disconnect Life



Electrical: Frequency Range DC - 40 GHz Temperature Range -55 to +125 °C

Mechanical:

Glass Bead

Body and Inner Conductor Gold Plated (**) Fe/Ni/Co

Alloy (KOVAR)

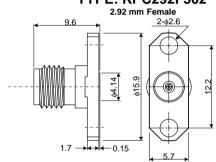
Insulator #7070 Glass (Corning)

Others:

Soldering Temperature 330°C (max) He Leak Rate < 1x10⁻¹⁰ Pam³/sec

Production Status 2 Weeks Lead-Time for Shipping

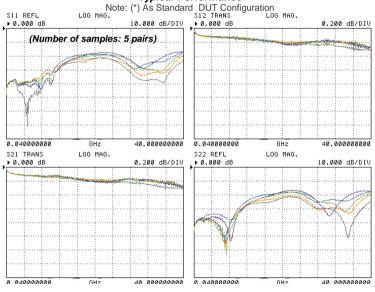
TYPE: KPC292F302



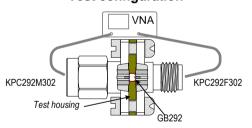
TYPE: GB292 Glass Bead



Typical Performance



Test configuration

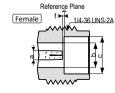


Standard DUT:

Cascaded KPC292M302 (Customized Product, On reguest), GB292 and KPC292F302

Interface Mating Dimensions of KPC292 (2.92 mm Connectors)

All dimensions are in millimeters. (**) Thermo-sonic wire bondable gold plating 0-0.050



RoHS Compliant REACH Compliant

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https://kmco.co.jp/ E-mail: sales-j@kmco.co.jp



Semirigid Cable Assemblies, Within (Conform to IEEE-Std-287)



1 mm Up to 110 GHz



1.85 mm Up to 60/65 GHz 2.4 mm Up to 50 GHz 2.92 mm Up to 40 GHz

Semirigid Cable Assemblies, Between (Conform to IEEE-Std-287)



1 mm/1.85 mm Up to 67 GHz



2.4 mm /1.85 mm Up to 50 GHz 2.92 mm/1.85 mm Up to 40 GHz 2.92 mm/2.4 mm Up to 40 GHz



1.85 mm/SMPM ^(*) Up to 65 GHz 2.4 mm /SMPM ^(*) Up to 50 GHz 2.92 mm/SMPM ^(*) Up to 40 GHz

SemiFlex Cable Assemblies (Conform to IEEE-Std-287)



1 mm/1 mm	Up to 110 GHz
1.85 mm/1.85 mm	Up to 65 GHz
1.85 mm/SMPM ^(*)	Up to 65 GHz
2.92 mm/2.92 mm	Up to 40 GHz
2.92 mm/SMPM ^(*)	Up to 40 GHz

(*) Compatible with "GPPO" and "Mini SMP"

Re-Formable Semirigid Cable Assemblies, In-Series Connector Interface 1 mm for DC - 110 GHz

DESCRIPTION

"CA100FF, MF, and MM"

re-formable semirigid cable assemblies are up to 110 GHz and easy to install with bending by hand at your lab/site.

They are designed for broadband measurement, instrument, and system applications.

All materials are "lead free".

SPECIFICATIONS

See below table.

CABLE PROPERTIES

Outer Conductor 1.19 mm Diameter Copper

with Cu/Sn/Zn Plated

Center Conductor Silver Plated Copper

Insulator PTFE

Moding Frequency 112 GHz (Approx.)
Delay Time 0.476 ns/100 mm
Inside Bending Radius 3 mm (min)

"Non-Magnetic"

Production Status 2 Weeks Lead-Time for Shipping



[*] Please specify length (L: □□□□ see following table) when you order this item. For example: CA100MM0035 (Length: 35 mm)

	TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)
CA100FF □□□□ Female/Female	13(typ)						30 to 300 mm
CA100MF □□□□ Male/Female	13 _(typ) 13 _(typ)	1 mm	DC-110 GHz	> 17 dB	See Fig.1	-55 to +100 °C	+/-1 mm [*] (Over 301 mm:
CA100MM □□□□ Male/Male	13 _(typ)						Negotiable)

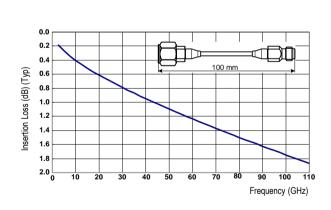


Fig.1 Frequency vs Insertion Loss, L=100 mm

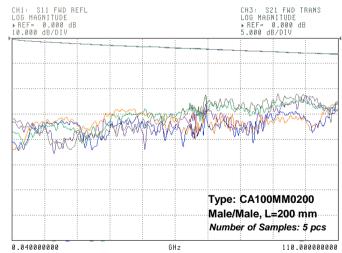
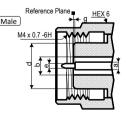


Fig. 2 Typical Performance

Interface Mating Dimensions of KPC100 (1 mm Connectors)

Reference Plane

M4 x 0.7-6g



| KPC100(1 mm) | a | φ 0.434 | b | φ 1.000 | c | φ 2.390 | d | φ 2.358 | e | φ 0.250 | f | 0-0.013 | g | 0-0.013

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

Rev. 03 June 2017



All dimensions are in millimeters.

Re-Formable Semirigid Cable Assemblies, In-Series

Connector Interface 1.85 mm for DC - 60 GHz. 2.4 mm for DC - 50 GHz, 2.92 mm for DC - 40 GHz

DESCRIPTION

"CA185/240/292FF, MF, and MM"

re-formable semirigid cable assemblies are up to 40, 50 and 60 GHz, and easy to install with bending by hand at your lab/site

They are designed for broadband measurement, instrument, and system applications.

All materials are "lead free".

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

Outer Conductor 2.2 mm Diameter Copper

with Cu/Sn/Zn Plated

Center Conductor Silver Plated Copper

Insulator Solid PTFE Moding Frequency 61 GHz (Approx.) **Delay Time** 0.476 ns/100 mm Inside Bending Radius 3.2 mm (min)

"Non-Magnetic"



Production Status 2 Weeks Lead-Time for Shipping

[*] Please specify length (L: \$\Pi\Pi\Pi\ \text{see following table}) when you order this item. For example: CA185MM0035 (Length: 35 mm)

TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)
CA185FF 000 14.3 CA185MF 000 Male/Female 13.2 14.3 CA185MM 000 14.3 CA185M	1.85 mm	DC-60 GHz	> 18 dB		-	
CA240MF DDD Ale/Male CA240MM DDDD Ale/Male CA240MM DDDD Ale/Male/Male CA240MM DDDD Ale/Male/Male CA240MM DDDD Ale/Male/Male CA240MM DDDD Ale/Male/Male CA240MM DDDD Ale/Male CA240MM DDD Ale/Male CA24	2.4 mm	DC-50 GHz	> 18 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*] (5 mm step): Standard (Over 300 mm: Negotiable)
CA292FF CA292FF CA292MF CA292MF CA292MM CA292M	2.92 mm	DC-40 GHz	> 20 dB			(10golidbio)

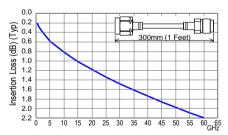


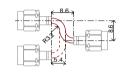
Fig.1 Frequency vs Insertion Loss, L=300 mm

-CAUTION---When you install the cable assembly, please support the section of the cable close to the connector with your fingers before tightening the nut.
This cable is composed

of a thin copper tube and could be easily damaged by applying a twist stress.

Fig.2 Tightening the Nut

Reference for Minimum Cable Installation Space by Rounded Re-Forming



Hand Bender 2200 for Re-Forming (R3.2/7 mm)

CAUTION: Bending of the Cable Using Hand Bender 2200

In order to prevent any damage in the joint part of the cable and the connector, please bend the cable about 4 mm away from the joint part.





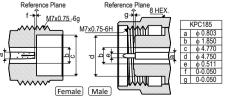
RoHS Compliant

REACH Compliant

NOTE: All dimensions are in millimeters.

Connector Interface Mating Dimensions

KPC185 (1.85 mm Connectors) Reference Plane е<u>8 не</u>х g-T M7x0.75 -6a MMM



KPC240 (2.4 mm Connectors) Reference Plane 个。 <u>8 HEX</u> Reference Plane g-∯r M7x0.75_-6g Female Male

KPC292 (2.92 mm Connectors) Reference Plane 1/4-36 UNS-2A 1/4-36 UNS-2E Female Male

Specifications Subject to Change Without Notice

Rev. 04 Oct 2019



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Re-Formable Semirigid Cable Assemblies, Between

Connector Interface 1 mm and 1.85 mm for DC - 67 GHz

DESCRIPTION

"CA185F100F, CA185F100M, CA185M100F, and CA185M100M"

re-formable semirigid cable assemblies, Between, are up to 67 GHz and easy to install with bending by hand at your lab/site. They are designed for broadband measurement, instrument, and system applications.

All materials are "lead free".

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

Outer Conductor 1.19 mm Diameter Copper

with Cu/Sn/Zn Plated

Center Conductor Silver Plated Copper

Insulator PTFE

Inside Bending Radius 3 mm (min)

Moding Frequency 112 GHz (Approx.)
Delay Time 0.476 ns/100 mm

"Non-Magnetic"



Production Status 2 Weeks Lead-Time for Shipping

[*] Please specify length (L:□□□□ see following table) when you order this item. For example: CA185M100M0035 (Length: 35 mm)

Т	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)	
CA185F100F □□□□□ Female/Female	14(Typ) 13(Typ)						
CA185F100M 🗆 🗆 Female/Male	13(Typ)	1.85 mm /1 mm	DC-67 GHz	> 15 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*]
CA185M100F □□□□ Male/Female	13.5(Typ) 13(Typ)						(Over 300 mm: Negotiable)
CA185M100M□□□□ Male/Male	13.5(Typ) 13.7(Typ)						

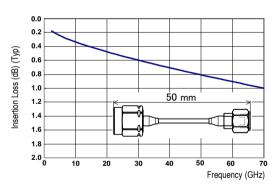


Fig.1 Estimated Insertion Loss, Including Adaptor

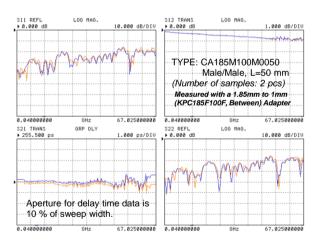


Fig.2 Typical Performance

NOTE: All dimensions are in millimeters.

RoHS Compliant

REACH Compliant

Connector Interface Mating Dimensions

KPC100 (1 mm Connectors)

Reference Plane

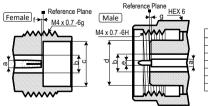
Reference Plane

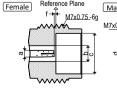
Reference Plane

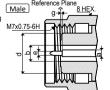
Reference Plane

Reference Plane

Reference Plane







 KPC185(1.85 mm)

 a
 φ 0.803

 b
 φ 1.850

 c
 φ 4.770

 d
 φ 4.750

 e
 φ 0.511

 f
 0-0.050

 g
 0.0.050

Specifications Subject to Change Without Notice

<*> Matable with 2.4 mm connectors

Rev. 03 June 2017

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Connector Interface 2.4 mm/1.85 mm for DC - 50 GHz and 2.92 mm/1.85 mm, 2.92 mm/2.4 mm for DC - 40 GHz

DESCRIPTION

The Re-Formable Semirigid Cable Assemblies, Between, are up to 40 and 50 GHz, and easy to install with bending by hand at your lab/site. They are designed for broadband measurement, instrument, and system applications.

All materials are "lead free".

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

Outer Conductor 2.2 mm Diameter Copper

with Cu/Sn/Zn Plated Silver Plated Copper

Center Conductor Insulator Solid PTFE
Moding Frequency Delay Time 0.476 ns/100 mm
Inside Bending Radius 3.2 mm (min)

"Non-Magnetic"



Production Status
2 Weeks Lead-Time
for Shipping

[*] Please specify length (L: DDDD see following table) when you order this item. For example: CA240F185M0035 (Length: 35 mm)

TYPE	TYPE		Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)				
CA240F185F □□□□ Female/Female	15.1 14.3										
CA240F185M 🔲 🔲 Female/Male		2.4 mm/	DC-50 GHz								
CA240M185F DDDD	13.9	1.85 mm	50 00 0112			-55 to					
CA240M185MDDDD	13.9 13.2 L			> 18 dB							
CA292F185F □□□□ Female/Female	14.3						35 to 300 mm +/-2 mm [*]				
CA292F185M 🗆 🗆 Female/Male	14.3	2.92 mm/			See		(5 mm step): Standard				
CA292M185F DDDD	13.4	1.85 mm	1.85 mm	1.85 mm	1.85 mm	1.85 mm			Fig. 1	+100 °C	(Over 300 mm:
CA292M185MUUUU Male/Male	13.4		DC-40 GHz				Negotiable)				
CA292F240F □□□□ Female/Female	15.1										
CA292F240M 🗆 🗆 Female/Male	14.3	2.92 mm									
CA292M240F DDDD	13.4	/2.4 mm	/2.4 mm	/2.4 mm							
CA292M240MDDDD	13.4										

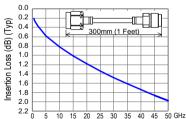


Fig.1 Frequency vs Insertion Loss, L=300mm

Specifications Subject to Change Without Notice

---CAUTION--When you install the cable assembly, please support the section of the cable close to the connector with your fingers before tightening the nut. This cable is composed of a thin copper tube and could be easily damaged by applying a twist stress.



Fig.2 Tightening the Nut

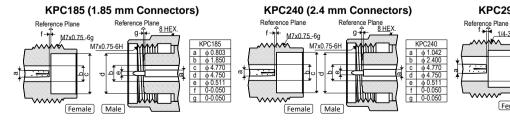
Reference for Minimum Cable Installation Space by Rounded Re-Forming



Reach Compliant

KPC292 (2.92 mm Connectors)

Connector Interface Mating



NOTE: All dimensions are in millimeters

Rev. 04 Oct 2019



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Female Male

Re-Formable Semirigid Cable Assemblies, Between

Connectors: 1.85 mm, 2.4 mm, 2.92 mm, and SMPM

DESCRIPTION

The Re-Formable Semirigid Cable Assemblies, Between, are up to 65 GHz and easy to install with bending by hand at your lab/site.

They are designed for broadband measurement, instrument, and system applications.

All materials are "lead free".

*SMPM: conforms to MIL-STD-348A 328.1

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

1.19 mm Diameter Copper Outer Conductor with Cu/Sn/Zn Plated

Center Conductor Silver Plated Copper

Insulator **PTFE**

Moding Frequency 111 GHz (Approx.) **Delay Time** 0.476 ns/100 mm Inside Bending Radius 3 mm (min)

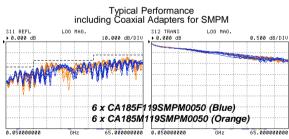
"Non-Magnetic"

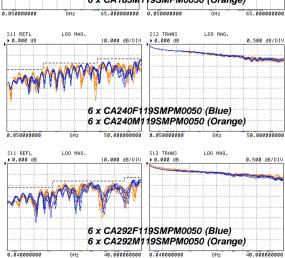


Production Status 2 Weeks Lead-Time for Shipping

[*] Please specify length (L: $\square\square\square\square$ see following table) when you order this item. For example: CA185F119SMPM0025 (Length: 25 mm)

TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)	
CA185F119SMPM	1.85 mm /SMPM	DC-65 GHz	< 13 GHz: > 22 dB 13-48 GHz: > 16 dB 48-65 GHz: > 12 dB				
CA240F119SMPM	2.4 mm /SMPM	DC-50 GHz	< 13 GHz: > 22 dB 13-38 GHz: > 16 dB 38-50 GHz: > 13 dB	See Fig. 1	-55 to +100 °C	25 to 300 mm +/-2 mm [*] (Over 300 mm: Negotiable)	
CA292F119SMPM	2.92 mm /SMPM	DC-40 GHz	< 13 GHz: > 22 dB 13-35 GHz: > 16 dB 35-40 GHz: > 13 dB				





mm (Typ) 0.4 (dB)/100 0.6 0.8 Loss nsertion

Fig.1 Frequency vs Insertion Loss

---CAUTION---When you install the cable assembly, please support the section of the cable close to the connector with your fingers before tightening the nut. This cable is composed of a thin copper tube and could be easily damaged by applying a twist stress



Fig.2 Tightening the Nut

Hand Bender 1200 for Re-Forming (R3/6 mm) 4mm (Approx.) CAUTION: Bending of the cable using hand Bender 1200 In order to prevent any damage in the joint part of the cable and the connector, please bend the cable about 4 mm away from the joint part.



Specifications Subject to Change Without Notice

Rev. 03 June 2017



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DESCRIPTION

"SFCA100FF, MF, and MM" semi-flexible cable assemblies are up to 110 GHz and easy to install in a narrow space with hand form at your lab/site.

They are designed for broadband measurement, instrument, and system

All materials are "lead free".

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

1.19 mm Diameter Outer Conductor

Tin-Soaked Copper Wire Braid

Center Conductor Silver Plated Copper

Solid PTFE Insulator

112 GHz (Approx.) Moding Frequency 0.476 ns/100 mm **Delay Time**

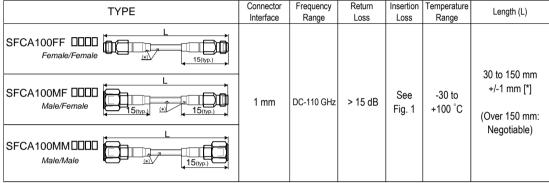
Inside Bending Radius 2 mm (min) "Non-Magnetic"

Production Status

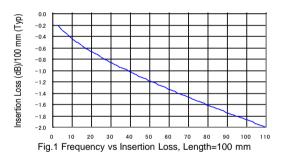


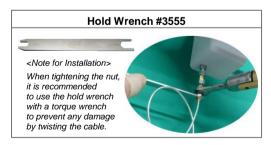
[*] Please specify length (L: $\square\square\square\square$ see following table) when you order this item.

For example: SFCA100MM0050 (Length: 50 mm)



(*) Jacket (UL certified heat shrink tube) for cable braid protection





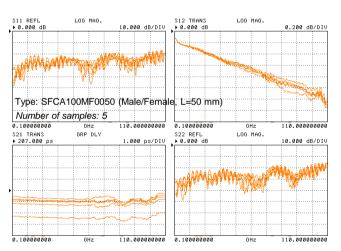
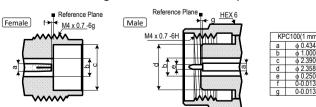


Fig.2 Typical Performance

Interface Mating Dimensions of KPC100 (1 mm Connectors)



RoHS Compliant REACH Compliant

NOTE: All dimensions are in millimeters

Rev. 04 Oct 2019



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Specifications Subject to Change Without Notice

1.85 mm/SMPM for DC - 65 GHz, 2.92 mm/SMPM for DC - 40 GHz

DESCRIPTION

The Semi-Flexible Cable Assemblies are up to 40 and 65 GHz, and easy to install at your lab/site.

They are designed for broadband measurement, instrument, and system use.

All materials are **"lead free"**. *SMPM: conforms to MIL-STD-348A NOTICE 5 328.1. SMPM female interface

SPECIFICATIONS

Electrical:

See below table.

CABLE PROPERTIES

Outer Conductor 1.19 mm Diameter

Tin-Soaked Copper Wire Braid
Center Conductor Silver Plated Copper

Insulator Solid PTFE
Moding Frequency 112 GHz (Approx.)
Delay Time 0.476 ns/100 mm

Inside Bending Radius 2 mm (min)

"Non-Magnetic"



Production Status 2 Weeks Lead-Time for Shipping

[**] Please specify length (L: 0000 see following table) when you order this item.

For example: SFCA185MM0035 (Length: 35 mm)

SFCA185MM0035J (Length: 35 mm, with Jacket)

TYPE		Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)	With Jacket
SFCA185119FF □□□□ Female/Female	13.85					. 5.		
SFCA185119MF □□□□ Male/Female	13.85	1.85 mm	DC-65 GHz (Within)					
SFCA185119MM 🗆 🗆 Male/Male	12.85					-55 to +100 °C (-30 to +100 °C for Jacket Type)	35 to 150 mm +/-2 mm [**] Standard (Over 150 mm: Negotiable)	Available (UL Certified Heat Shrink Tube)
SFCA292119FF □□□□ Female/Female	14.2		DC-40 GHz (Within)					
SFCA292119MF □□□□ Male/Female	13.3	2.92 mm		> 17 dB	See Fig. 1			
SFCA292119MM 🗆 🗆 Male/Male	13.3							
SFCA292F119185F □□□□ Female/Female	14.2 13.85 14.2 13.85 14.2 13.85 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2		DC-40 GHz (Between)					
SFCA292M119185F 🗆 🗆 Male/Female	13.85	2.92 mm						
SFCA292F119185M □□□□ Female/Male	14.2 12.85 (www.gr.)	/1.85 mm						
SFCA292M119185M□□□□ Male/Male	13333333333333333333333333333333333333							
SFCA185F119SMPM 🗆 🗆 Female/Female	13.85	1.85 mm /SMPM	DC-65 GHz	< 13 GHz: > 22 dB 13-48 GHz: > 16 dB				
SFCA185M119SMPM □□□□ Male/Female	12.85	[1]	(Between) DC-40 GHz	48-65 GHz > 12 dB				
SFCA292F119SMPM □□□□ Female/Female	14.2	2.92 mm /SMPM		> 16 dB				
SFCA292M119SMPM 🗆 🗆 Male/Female	13.3	/SIMPINI [1]	(Between)	> 10 UD	ı			

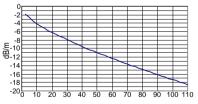
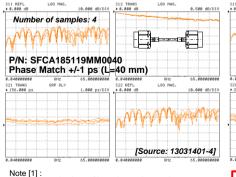


Fig.1 Frequency vs Insertion Loss, L=1000 mm



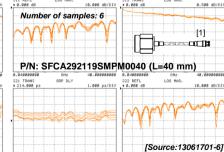
 $Specifications \ Subject \ to \ Change \ Without \ Notice$

Typical Performance



Note [1]: The measured values of insertion and return loss are included in the performance of the SMPM to 1.85 mm (or 2.92 mm) adaptor.

NOTE: All dimensions are in millimeters.



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