

Precision Coaxial Connectors

Coaxial Adapters, Within Series

1mm/1mm
Up to 110 GHz



1.85mm/1.85mm
Up to 65 GHz



2.4mm/2.4mm
Up to 50 GHz



2.92mm/2.92mm
Up to 40 GHz



3.5mm/3.5mm
Up to 26.5 GHz



Coaxial Adapters, Between Series

1.85mm/1mm
Up to 67 GHz



2.4mm/1.85mm
Up to 50 GHz



2.92mm/1.85mm
Up to 40 GHz



2.92mm/2.4mm
Up to 40 GHz



3.5mm/2.4mm
Up to 26.5 GHz



Panel Adapters, Within



1.85mm Up to 65GHz
2.92mm Up to 40GHz

Front Panel Adapters



1.85mm Up to 65GHz
2.92mm Up to 40GHz

2-Hole Flange Launchers & Glass Beads

1mm Up to 110GHz



1.85mm Up to 65GHz



2.92mm Up to 40GHz



Hermetic Adapters, Within

1.85mm/1.85mm
Up to 65GHz



2.92mm/2.92mm
Up to 40GHz



Semirigid Cable Assemblies



1mm Up to 110GHz
1.85mm Up to 60/65GHz
2.4mm Up to 50GHz
2.92mm Up to 40GHz

Distributed from (except Japan)



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 ultra-broadband (up to sub-millimeter wave) measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

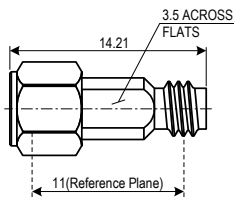
Frequency Range	DC - 110 GHz
SWR	< 1.3 (*), < 1.5 (**)
Insertion Loss	0.5 dB (typ.)
Electrical Length	11.6 mm (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

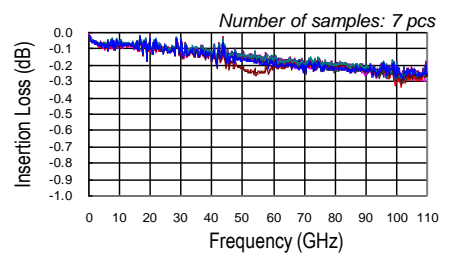
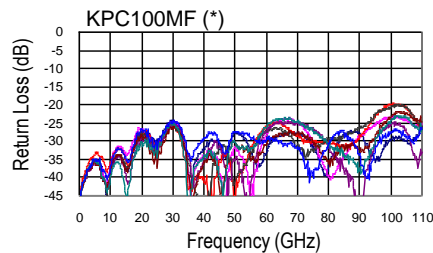
Body and Outer Conductor	Gold Plated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	45 N-cm (Nominal)
Connect/Disconnect Life	> 500 Cycles (Estimate)



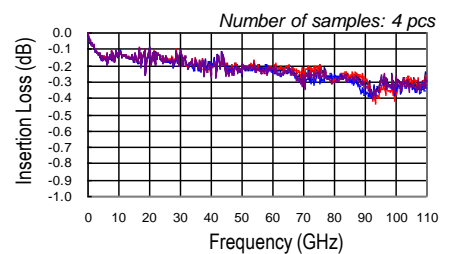
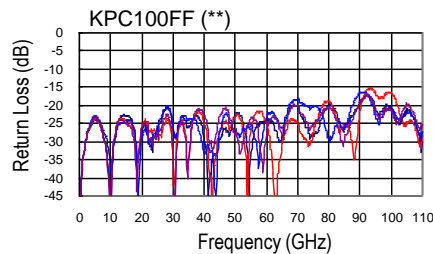
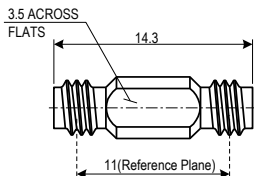
TYPE: KPC100MF 1 mm Male/1 mm Female



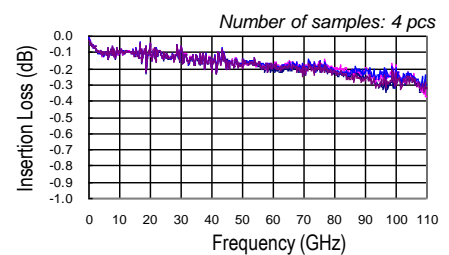
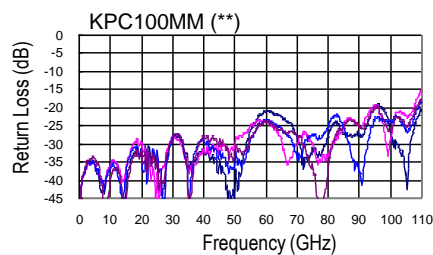
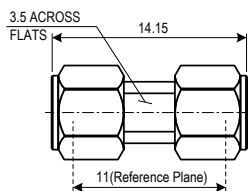
Typical Performance



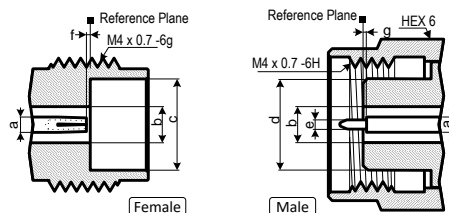
TYPE: KPC100FF 1 mm Female/1 mm Female



TYPE: KPC100MM 1 mm Male/1 mm Male



Interface Mating Dimensions of KPC100 (1 mm Connectors)



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

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

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Rev. 04 July 2020

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 measurement, instrument, and system applications.

SPECIFICATIONS

Electrical:

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

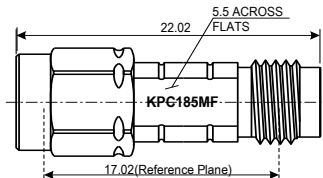


Production Status
2 Weeks Lead-Time
for Shipping

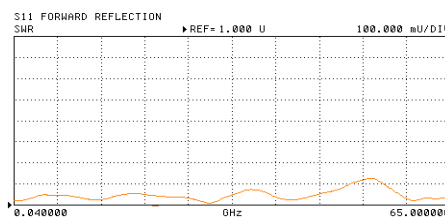
Typical Performance

TYPE: KPC185MF

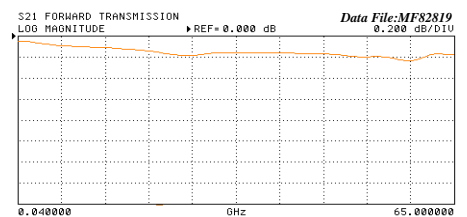
1.85 mm Male/1.85 mm Female



SWR

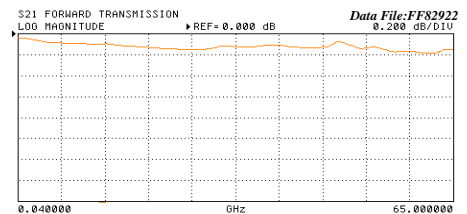
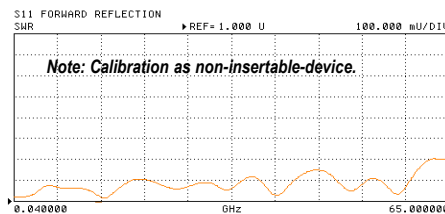
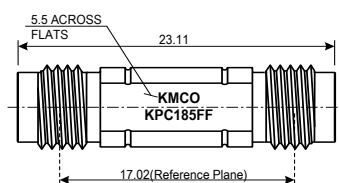


Insertion Loss



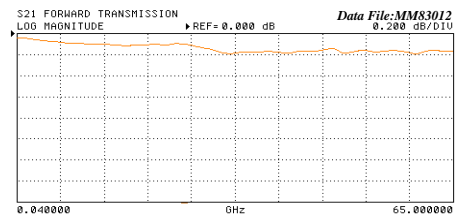
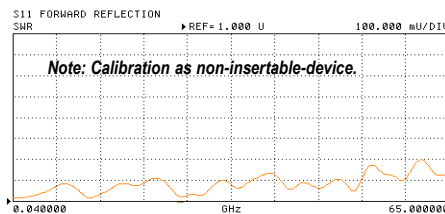
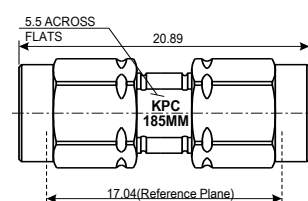
TYPE: KPC185FF

1.85 mm Female/1.85 mm Female

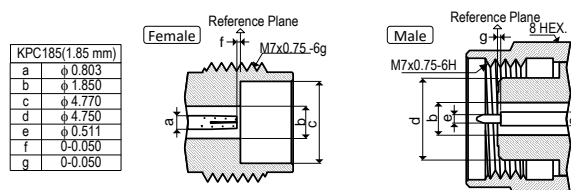


TYPE: KPC185MM

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

Specifications Subject to Change Without Notice

Rev. 03 June 2017

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KMCO Kawashima Manufacturing Co., Ltd.
ISO9001:14001 Certified

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https://kmco.co.jp/en/ e-mail: sales@kmco.co.jp

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:

Frequency Range	DC - 50 GHz
SWR	< 1.25
Insertion Loss	< 0.3 dB
Electrical Length	17.5 mm (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

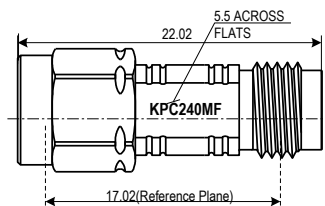
Body and Outer Conductor	Passivated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



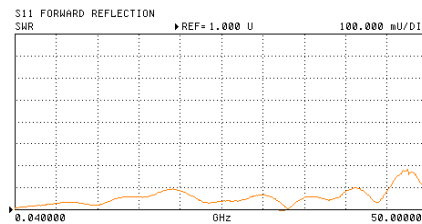
Production Status
2 Weeks Lead-Time
for Shipping

Typical Performance

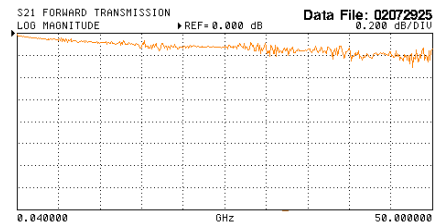
TYPE: KPC240MF 2.4 mm Male/2.4 mm Female



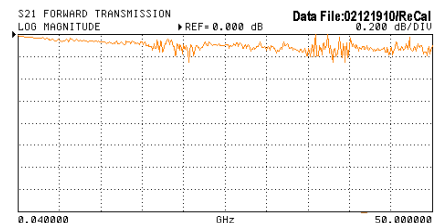
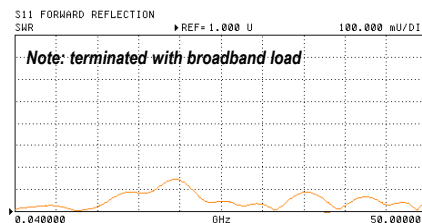
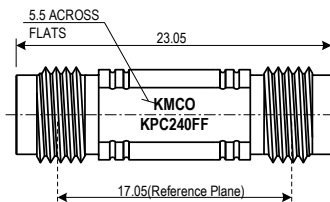
SWR



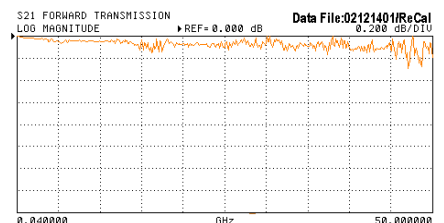
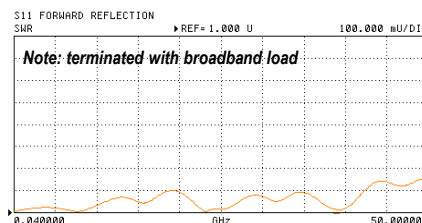
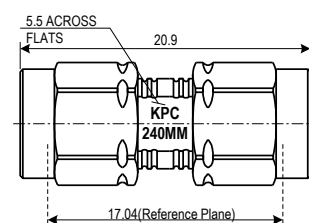
Insertion Loss



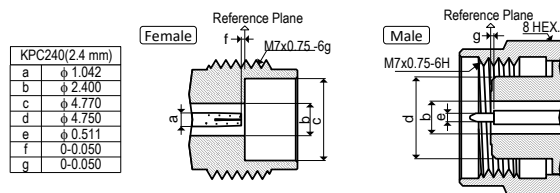
TYPE: KPC240FF 2.4 mm Female/2.4 mm Female



TYPE: KPC240MM 2.4 mm Male/2.4 mm Male



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



NOTE:

All dimensions are in millimeters.

RoHS Compliant

REACH Compliant

<*> Matable with 1.85 mm connectors

Specifications Subject to Change Without Notice

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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:

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

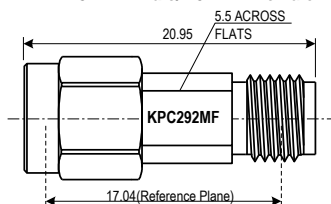


Production Status
2 Weeks Lead-Time
for Shipping

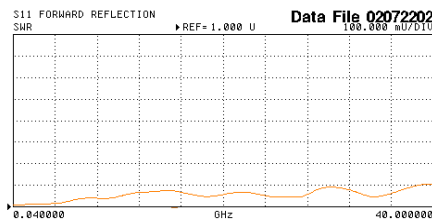
Typical Performance

TYPE: KPC292MF

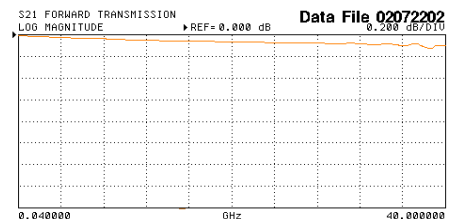
2.92 mm Male/2.92 mm Female



SWR

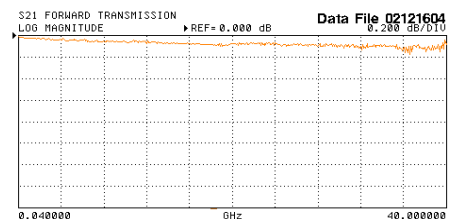
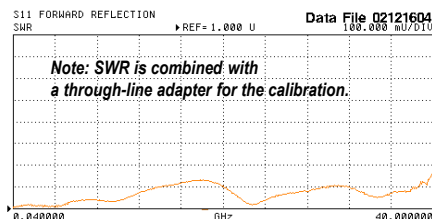
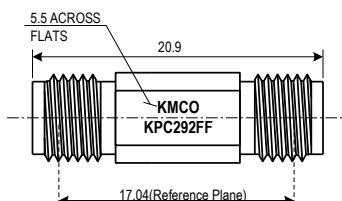


Insertion Loss



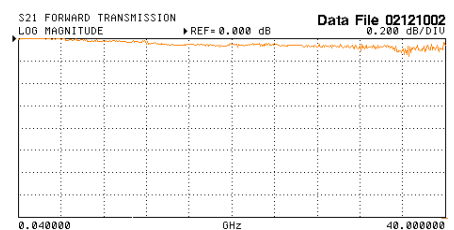
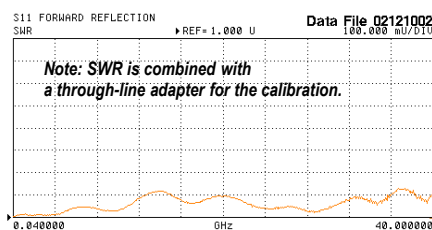
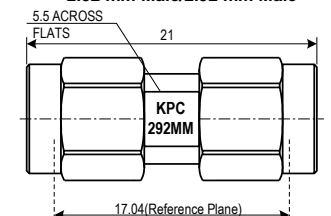
TYPE: KPC292FF

2.92 mm Female/2.92 mm Female



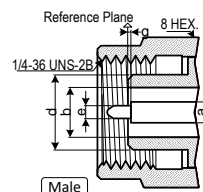
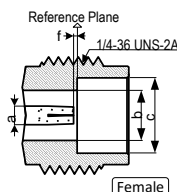
TYPE: KPC292MM

2.92 mm Male/2.92 mm Male



Interface Mating Dimensions of KPC292 (2.92 mm Connectors)

KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050



RoHS Compliant

REACH Compliant

NOTE:

All dimensions are in millimeters.

Specifications Subject to Change Without Notice

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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:

Frequency Range	DC - 26.5 GHz (Modeling: 34 GHz)
SWR	< 1.15
Insertion Loss	< 0.2 dB
Electrical Length	17.5 mm (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

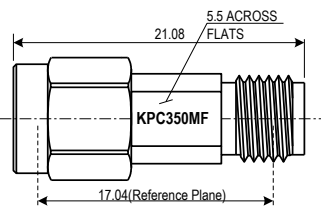
Body and Outer Conductor	Passivated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



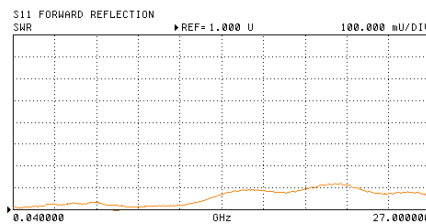
Production Status
2 Weeks Lead-Time
for Shipping

Typical Performance

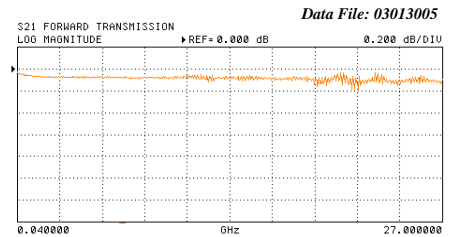
TYPE: KPC350MF 3.5 mm Male/3.5 mm Female



SWR

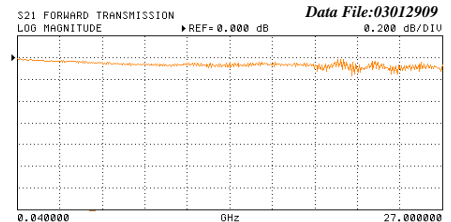
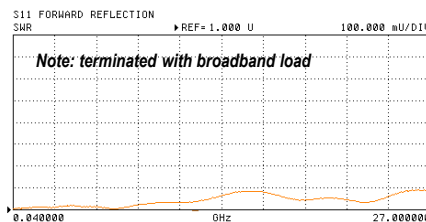
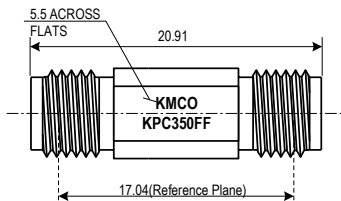


Insertion Loss



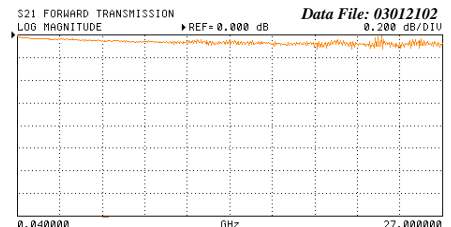
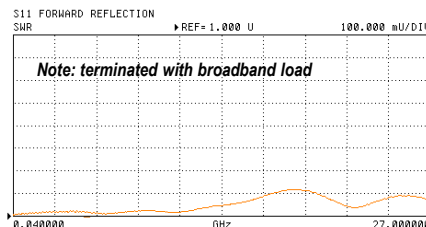
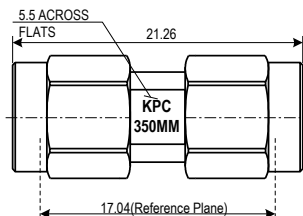
Data File: 03013005

TYPE: KPC350FF 3.5 mm Female/3.5 mm Female



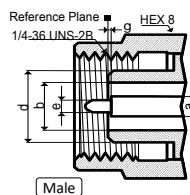
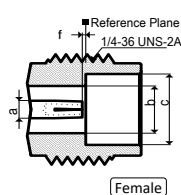
Data File: 03012909

TYPE: KPC350MM 3.5 mm Male/3.5 mm Male



Data File: 03012102

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



KPC350(3.5 mm)	
a	φ 1.520
b	φ 3.500
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050

NOTE:

All dimensions are in millimeters.

RoHS Compliant

REACH Compliant

<*> Matable with 2.92 mm connectors and SMA

Specifications Subject to Change Without Notice

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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:

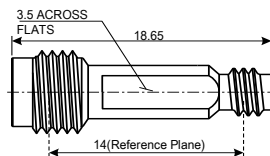
Frequency Range	DC - 67 GHz
SWR	< 1.4 ⁽¹⁾
Insertion Loss	0.8 dB (typ.) ⁽¹⁾
Electrical Length	14.6 mm (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

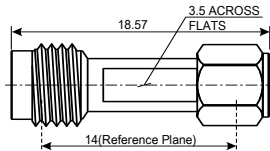
Body and Outer Conductor	Gold Plated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	90 N-cm for KPC185 (Nominal) 45 N-cm for KPC100 (Nominal)
Connect/Disconnect Life	> 500 Cycles (Estimate)



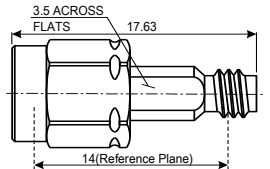
TYPE: KPC185F100F 1.85 mm Female/1 mm Female



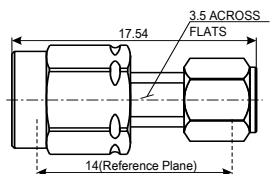
TYPE: KPC185F100M 1.85 mm Female/1 mm Male



TYPE: KPC185M100F 1.85 mm Male/1 mm Female



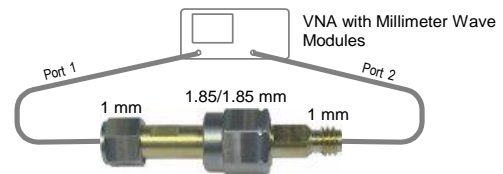
TYPE: KPC185M100M 1.85 mm Male/1 mm Male



RoHS Compliant

REACH Compliant

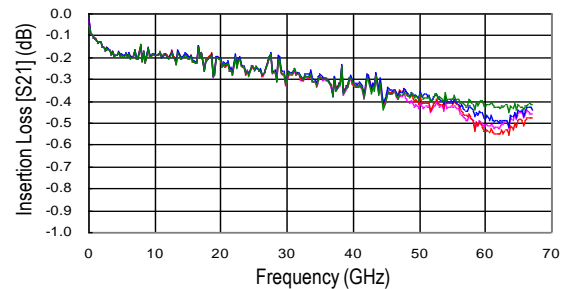
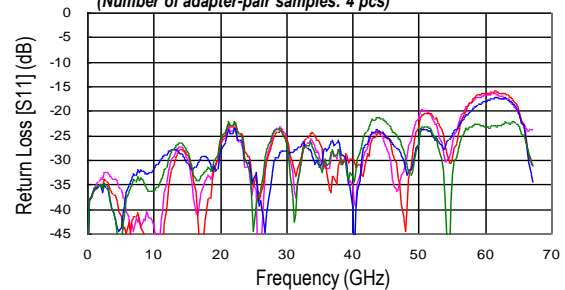
Performance Test Configuration



(Adapter Pair: Insertable-Device)

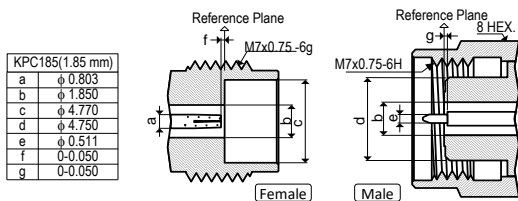
Typical Performance

(Number of adapter-pair samples: 4 pcs)

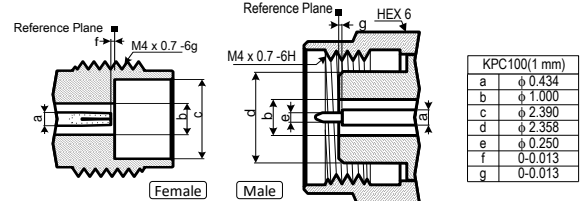


Interface Mating Dimensions

KPC185 (1.85 mm Connectors)



KPC100 (1 mm Connectors)



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.

Specifications Subject to Change Without Notice

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:

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

Mechanical:

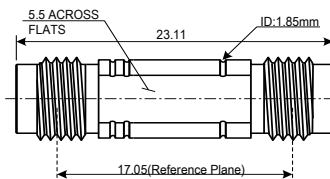
Body and Outer Conductor	Passivated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



Production Status
2 Weeks Lead-Time
for Shipping

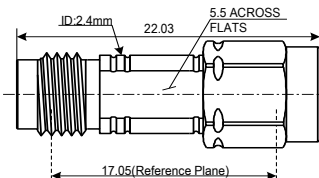
TYPE: KPC240F185F

2.4 mm Female/1.85 mm Female



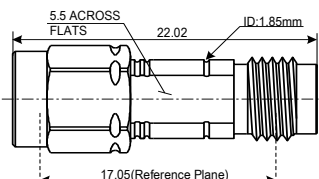
TYPE: KPC240F185M

2.4 mm Female/1.85 mm Male



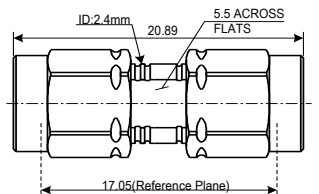
TYPE: KPC240M185F

2.4 mm Male/1.85 mm Female

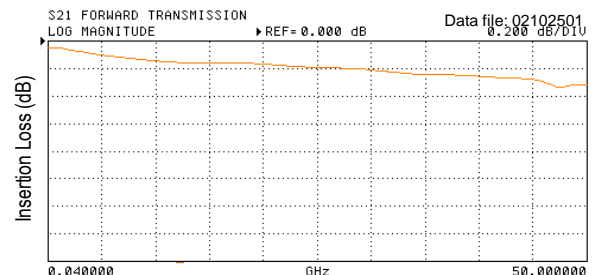
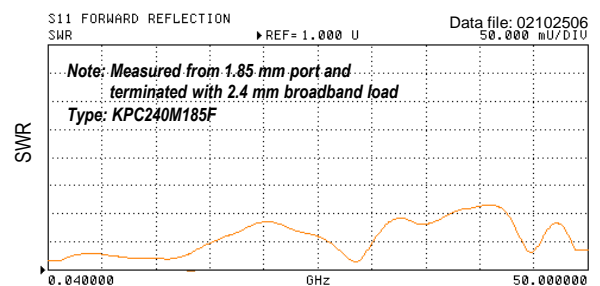


TYPE: KPC240M185M

2.4 mm Male/1.85 mm Male

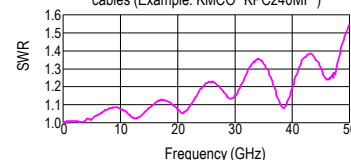


Typical Performance



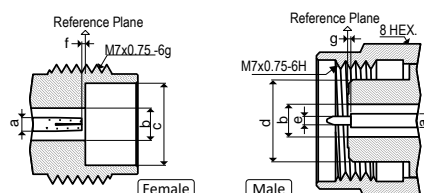
These adapters are designed to eliminate SWR degradation as shown in the below chart.

This 2.4 mm/2.4 mm coaxial adapter is mated to 1.85 mm test port cables (Example: KMCO "KPC240MF")



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

NOTE:
All dimensions are in millimeters.



KPC240(2.4 mm)		KPC185(1.85 mm)	
a	φ 1.042	a	φ 0.803
b	φ 2.400	b	φ 1.850
c	φ 4.770	c	φ 4.770
d	φ 4.750	d	φ 4.750
e	φ 0.511	e	φ 0.511
f	0-0.050	f	0-0.050
g	0-0.050	g	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

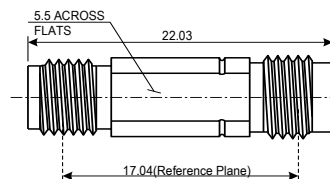
Mechanical:

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

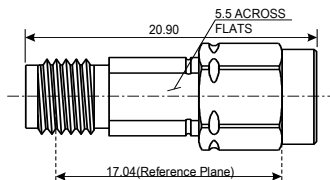


Production Status
2 Weeks Lead-Time
for Shipping

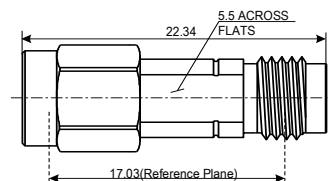
TYPE: KPC292F185F 2.92 mm Female/1.85 mm Female



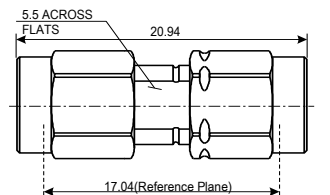
TYPE: KPC292F185M 2.92 mm Female/1.85 mm Male



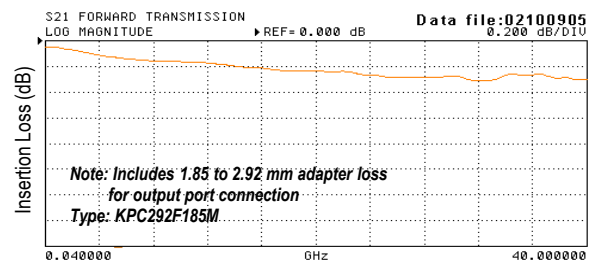
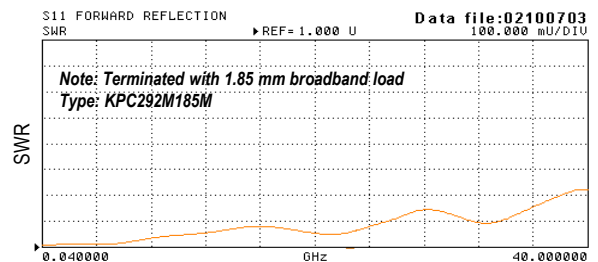
TYPE: KPC292M185F 2.92 mm Male/1.85 mm Female



TYPE: KPC292M185M 2.92 mm Male/1.85 mm Male



Typical Performance

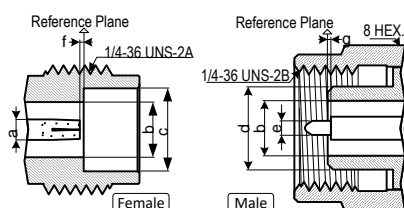


RoHS Compliant

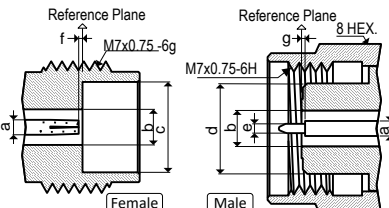
REACH Compliant

Interface Mating Dimensions

KPC292 (2.92 mm Connectors)



KPC185 (1.85 mm Connectors <*>)



KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050

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

NOTE:

All dimensions are in millimeters.

Specifications Subject to Change Without Notice

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<*> Matable with 2.4 mm connectors

Rev. 03 June 2017



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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:

Frequency Range

SWR

Insertion Loss

Electrical Length

Temperature Range

DC - 40 GHz

< 1.22

< 0.25 dB

17.5 mm (Nominal)

-55 to +125 °C

Mechanical:

Body and Outer Conductor

Inner Conductor

Passivated Stainless Steel

Gold Plated Beryllium

Copper and Brass

90 N-cm (Nominal)

> 1,000 Cycles

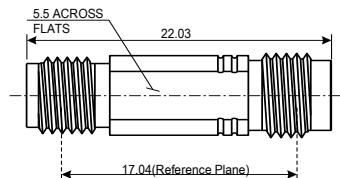
Coupling Torque

Connect/Disconnect Life

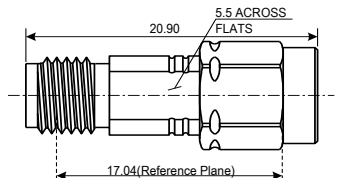


Production Status
2 Weeks Lead-Time
for Shipping

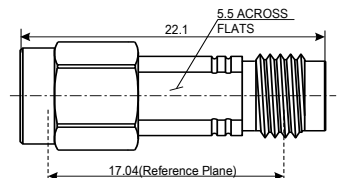
TYPE: KPC292F240F 2.92 mm Female/2.4 mm Female



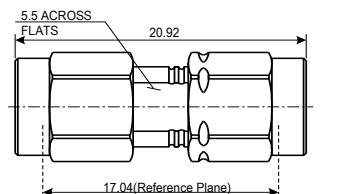
TYPE: KPC292F240M 2.92 mm Female/2.4 mm Male



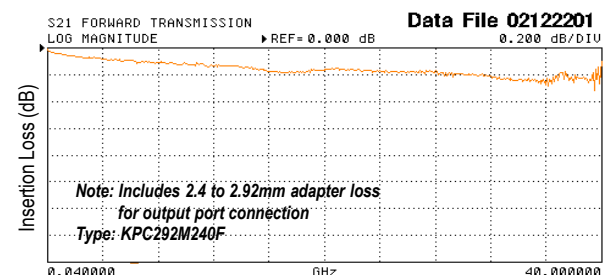
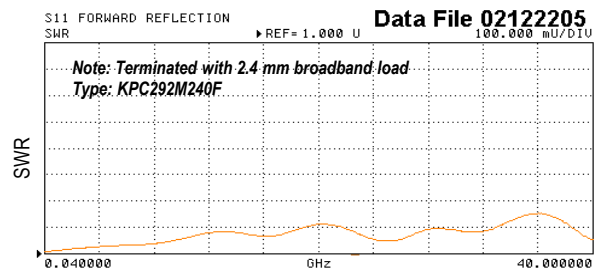
TYPE: KPC292M240F 2.92 mm Male/2.4 mm Female



TYPE: KPC292M240M 2.92 mm Male/2.4 mm Male



Typical Performance

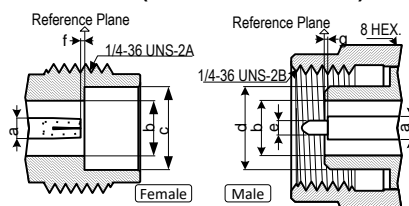


RoHS Compliant

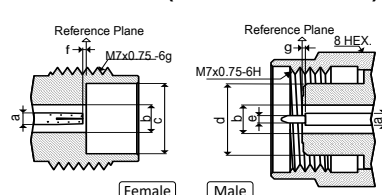
REACH Compliant

Interface Mating Dimensions

KPC292 (2.92 mm Connectors)



KPC240 (2.4 mm Connectors)



KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050

KPC240(2.4 mm)	
a	φ 1.042
b	φ 2.400
c	φ 4.770
d	φ 4.750
e	φ 0.511
f	0-0.050
g	0-0.050

NOTE:

All dimensions are in millimeters.

Specifications Subject to Change Without Notice

Rev. 03 June 2017

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KMCO
ISO9001:14001 Certified

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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

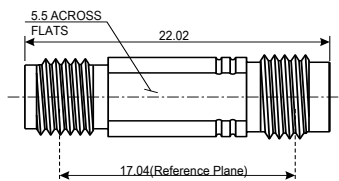
Mechanical:

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

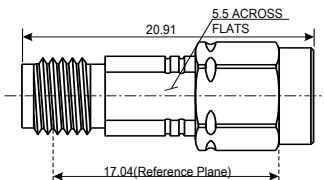


Production Status
2 Weeks Lead-Time
for Shipping

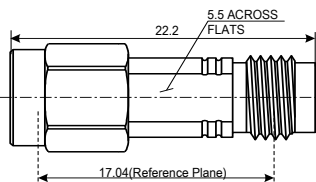
TYPE: KPC350F240F 3.5 mm Female/2.4 mm Female



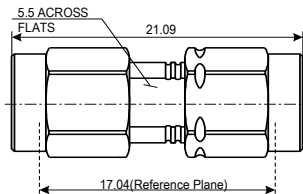
TYPE: KPC350F240M 3.5 mm Female/2.4 mm Male



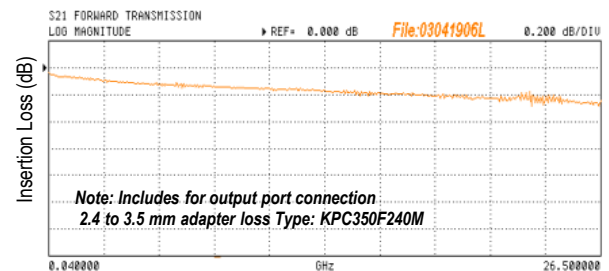
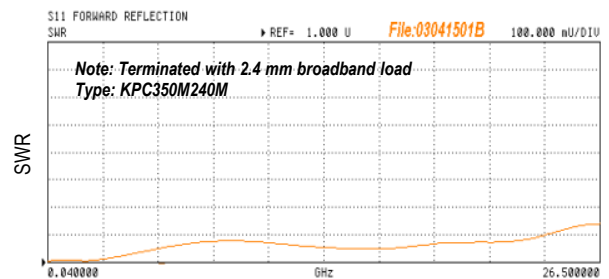
TYPE: KPC350M240F 3.5 mm Male/2.4 mm Female



TYPE: KPC350M240M 3.5 mm Male/2.4 mm Male



Typical Performance



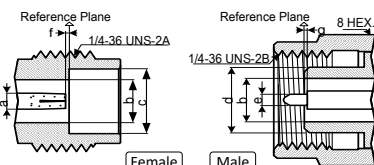
RoHS Compliant

REACH Compliant

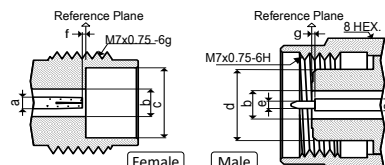
Interface Mating Dimensions

KPC350 (3.5 mm Connectors)

KPC350(3.5 mm)	
a	φ 1.520
b	φ 3.500
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050



KPC240 (2.4 mm Connectors <*>)



KPC240(2.4 mm)	
a	φ 1.042
b	φ 2.400
c	φ 4.770
d	φ 4.750
e	φ 0.511
f	0-0.050
g	0-0.050

NOTE:

All dimensions are in millimeters.

<*> Matable with 1.85 mm connectors

Specifications Subject to Change Without Notice

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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:

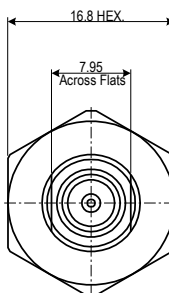
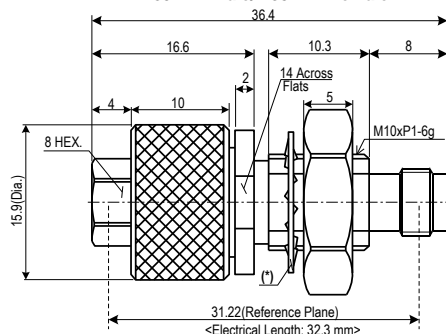
Body	Passivated Stainless Steel (*)
Outer Conductor	Gold Plated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



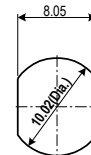
Production Status
3 Weeks Lead-Time
for Shipping

TYPE: KPC185MF FPA

1.85 mm Male/1.85 mm Female



Mounting Hole and Thickness
(Recommended)

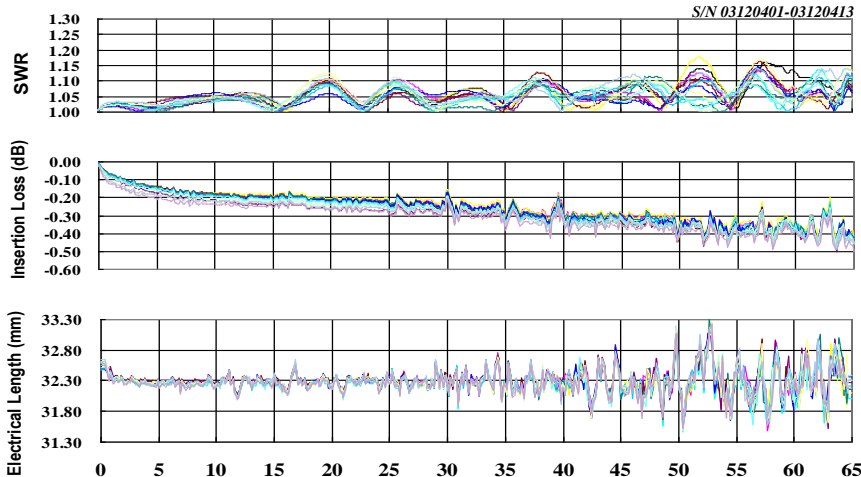


Thickness: 2 to 5.4 mm

Typical Performance

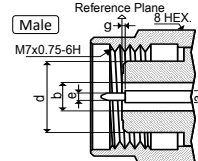
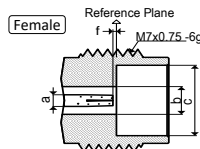
Number of Samples: 13 pcs

S/N 03120401-03120413



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

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



NOTE:

All dimensions are in millimeters.

(*)Toothed lockwasher is nickel-plated steel.

RoHS Compliant

REACH Compliant

<*> Matable with 2.4 mm connectors

Specifications Subject to Change Without Notice

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2.92 mm/2.92 mm Panel Adapter, In-Series 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:

Frequency Range	DC - 40 GHz
SWR	< 1.15
Insertion Loss	< 0.3 dB
Electrical Length	Shown below (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

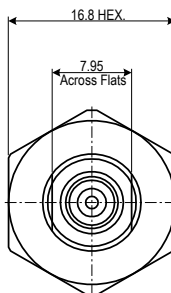
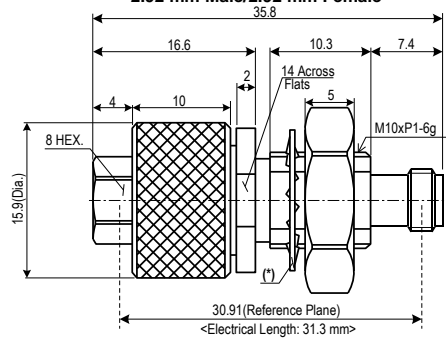
Body	Passivated Stainless Steel (*)
Outer Conductor	Gold Plated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



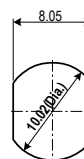
Production Status
3 Weeks Lead-Time
for Shipping

TYPE: KPC292MF FPA

2.92 mm Male/2.92 mm Female



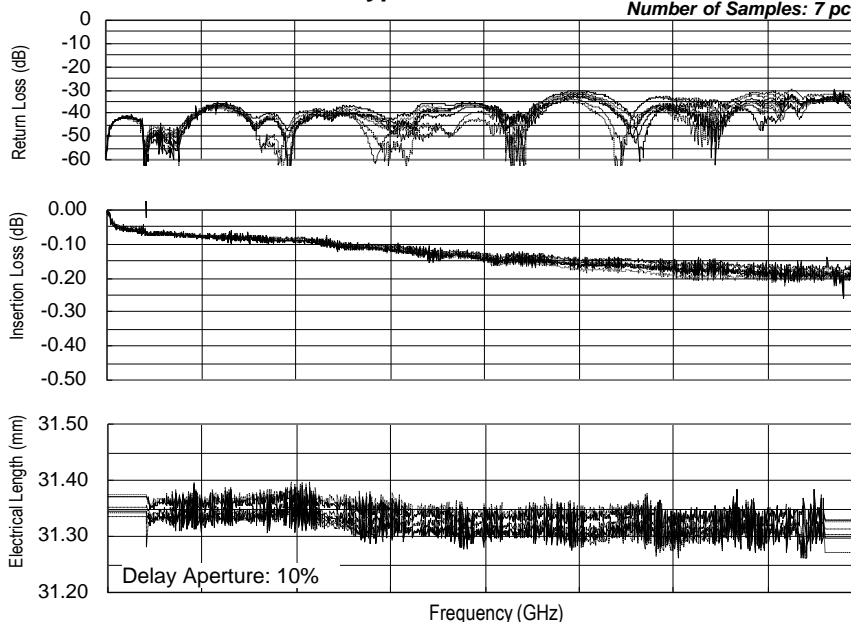
Mounting Hole and Thickness
(Recommended)



Thickness: 2 to 5.4 mm

Typical Performance

Number of Samples: 7 pcs



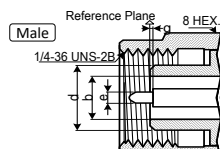
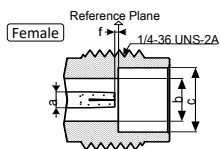
Interface Mating Dimensions of KPC292MF FPA (2.92 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.

(*) Toothed lockwasher is nickel-plated steel.

KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	φ 4.580
e	φ 0.920
f	0-0.050
g	0-0.050



RoHS Compliant

REACH Compliant

<*> Matable with 3.5 mm connectors and SMA

Specifications Subject to Change Without Notice

Rev. 03 June 2017

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Panel Adapter, In Series

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:

Frequency Range	DC - 65 GHz (1.85 mm) DC - 40 GHz (2.92 mm)
SWR	< 1.3 (1.85 mm) < 1.15 (2.92 mm)
Insertion Loss	< 0.4 dB (1.85 mm) < 0.25 dB (2.92 mm)
Electrical Length	Shown below (Nominal)
Temperature Range	-55 to +125 °C

Mechanical:

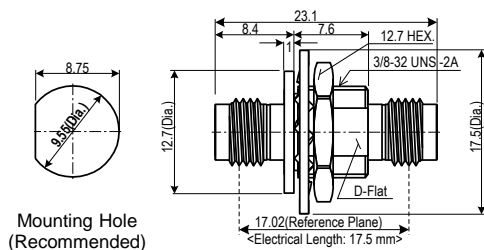
Body	Passivated Stainless Steel (*)
Outer Conductor	Passivated Stainless Steel (1.85 mm) (*) Gold Plated Stainless Steel (2.92 mm)
Inner Conductor	Gold Plated Beryllium Copper and Brass (1.85 mm) Gold Plated Beryllium Copper (2.92 mm)
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 1,000 Cycles



Production Status
2 Weeks Lead-Time
for Shipping

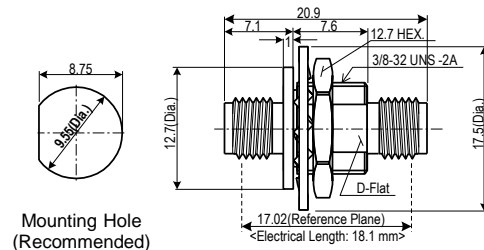
TYPE: KPC185FFPA

1.85 mm Female/1.85 mm Female

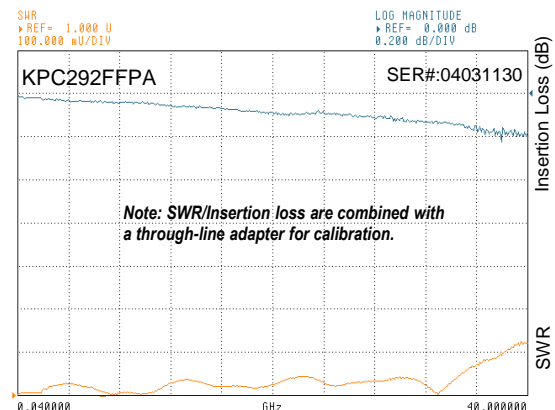
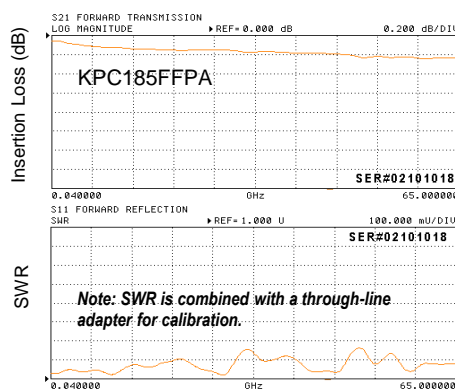


TYPE: KPC292FFPA

2.92 mm Female/2.92 mm Female



Typical Performance

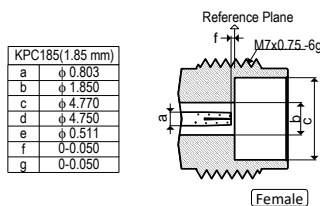


RoHS Compliant

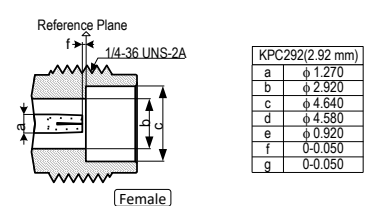
REACH Compliant

Interface Mating Dimensions

KPC185 (1.85 mm Connectors <*>)



KPC292 (2.92 mm Connectors)



NOTE:

All dimensions are in millimeters.

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

<*> Matable with 2.4 mm connectors

Specifications Subject to Change Without Notice

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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:

Frequency Range	DC - 65 GHz (1.85 mm) DC - 40 GHz (2.92 mm)
SWR	< 1.5
Insertion Loss	< 0.7 dB
Temperature Range	-55 to +125 °C

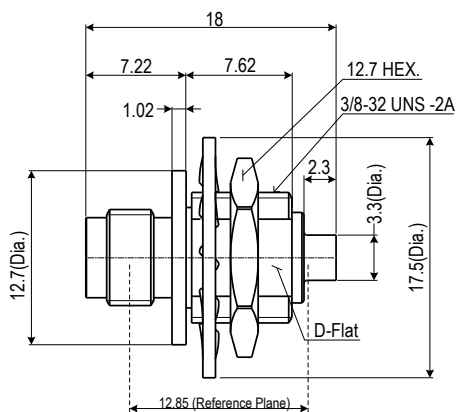
Mechanical:

Body and Outer Conductor	Passivated Stainless Steel (*)
Inner Conductor	Gold Plated Beryllium Copper and Brass
Coupling Torque	90 N-cm (Nominal)
Connect/Disconnect Life	> 100 Cycles (Estimate for SMPM)

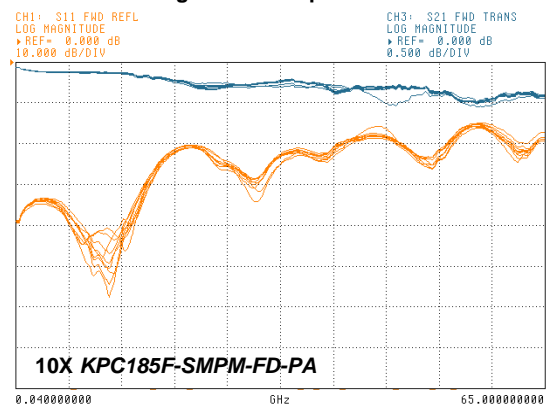


Production Status
2 Weeks Lead-Time
for Shipping

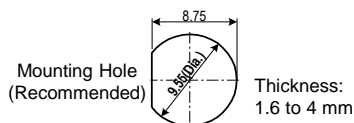
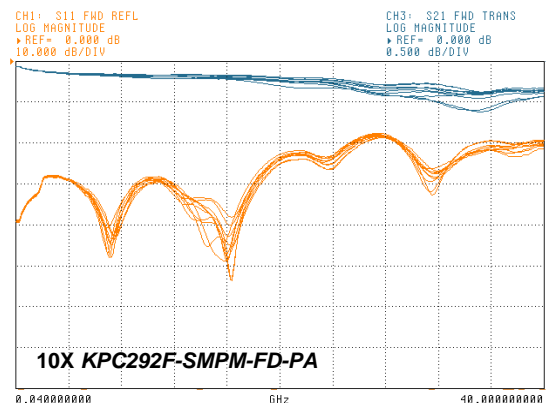
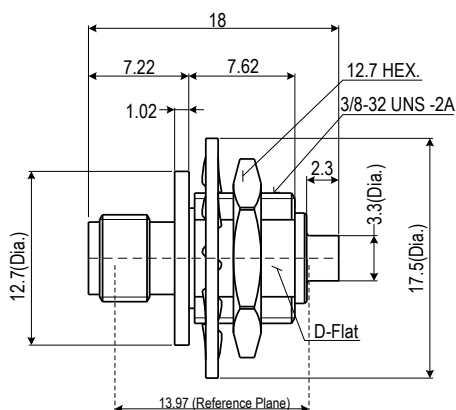
TYPE: KPC185F-SMPM-FD-PA 1.85 mm Female/SMPM-Male (Full detent)



Typical Performance including coaxial adapters for SMPM



TYPE: KPC292F-SMPM-FD-PA 2.92 mm Female/SMPM-Male (Full detent)



NOTE:

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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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:

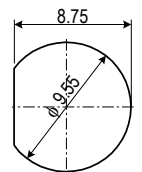
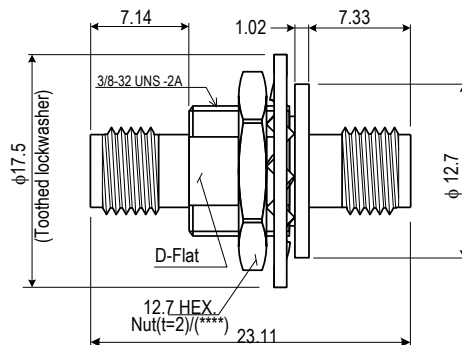
Frequency Range	DC - 20 GHz (*)
SWR	< 1.2
Insertion Loss	< 0.1 dB
Input Power	10 W (max)
Temperature Range	-55 to +85 °C

Mechanical:

Outer Conductor	Passivated Stainless Steel (**)
Inner Conductor	Gold Plated Beryllium Copper
Coupling Torque	56 N-cm (Nominal)
Connect/Disconnect Life	> 5,000 Cycles (***)

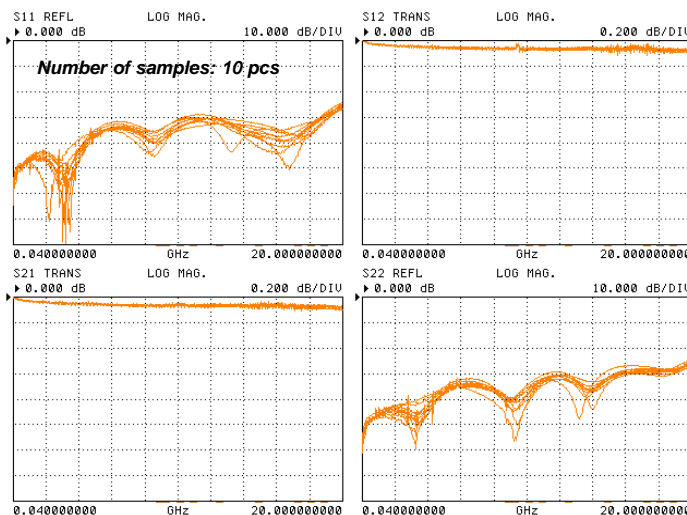


TYPE: SMA-FFPA Female/Female Outline

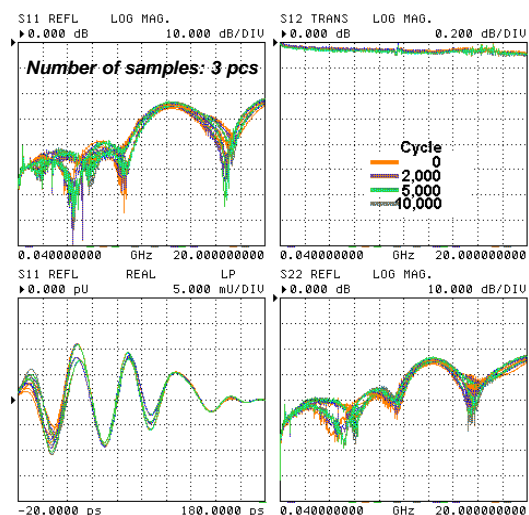


Mounting Hole
(Recommended)

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

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90 degree Angled-Swept Adaptor, Male to Female SMA Coaxial Adapters

DESCRIPTION

"SMA-525S" 90 degree angled-swept adaptor 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 (*)
SWR	< 1.25 (to 20 GHz) < 1.5 (to 24.6 GHz)
Insertion Loss	< 0.15 dB (to 20 GHz) < 0.23 dB (to 24.6 GHz)
Input Power	10 W (max)
Temperature Range	-55 to +85 °C

Mechanical:

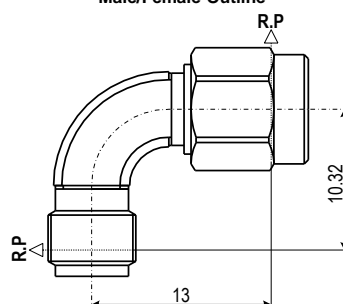
Outer Conductor	Nickel Plated Stainless Steel
Inner Conductor	Gold Plated Beryllium Copper
Coupling Torque	56 N-cm (Nominal)
Connect/Disconnect Life	> 500 Cycles (**)



Production Status
2 Weeks Lead-Time
for Shipping

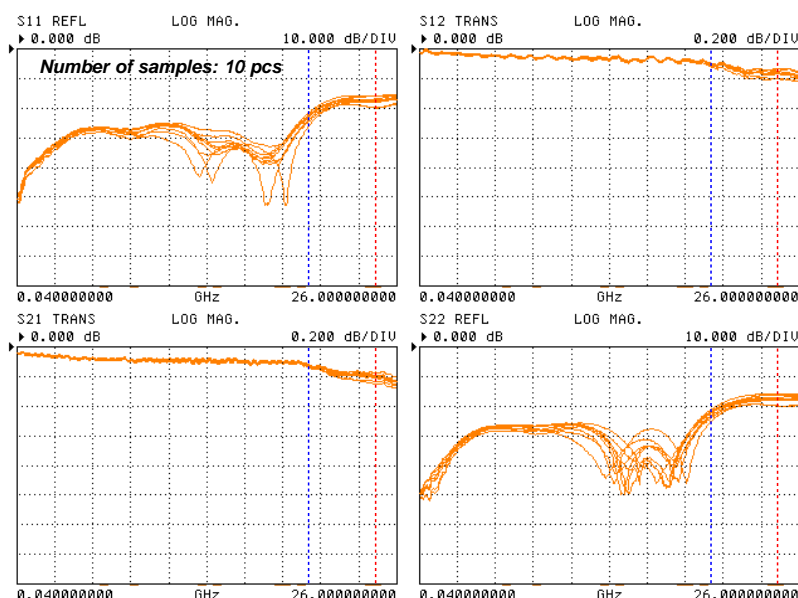
TYPE: SMA-525S

Male/Female Outline



RF Performance

("Insertable Device" Calibration in 3.5 mm System)



NOTE:

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

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1.85 mm/1.85 mm 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:

Frequency Range
 SWR
 Insertion Loss
 Electrical Length
 Temperature Range

DC - 65 GHz
 < 1.5
 < 0.7 dB
 Shown below (Nominal)
 -55 to +125 °C

Mechanical:

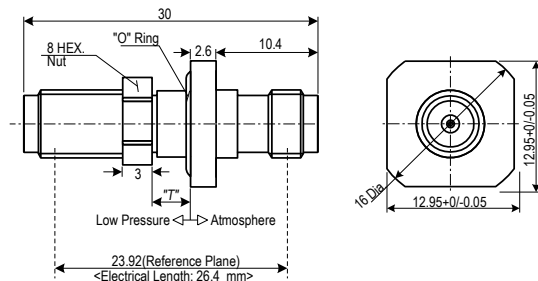
Body and Outer Conductor
 Inner Conductor
 Inner and Outer Conductor for Seal
 Insulator for Seal
 Gasket for Flange Seal
 Coupling Torque
 Connect/Disconnect Life
 He Leak Rate (*)

Gold Plated Stainless Steel
 Gold Plated Beryllium Copper
 Gold Plated Fe/Ni/Co Alloy (KOVAR)
 #7070 Glass (Corning)
 Fluoroelastomer "O" Ring
 90 N-cm (Nominal)
 > 1,000 Cycles
 < 1×10^{-10} Pam³/sec (< 1×10^{-9} atm cc /sec)



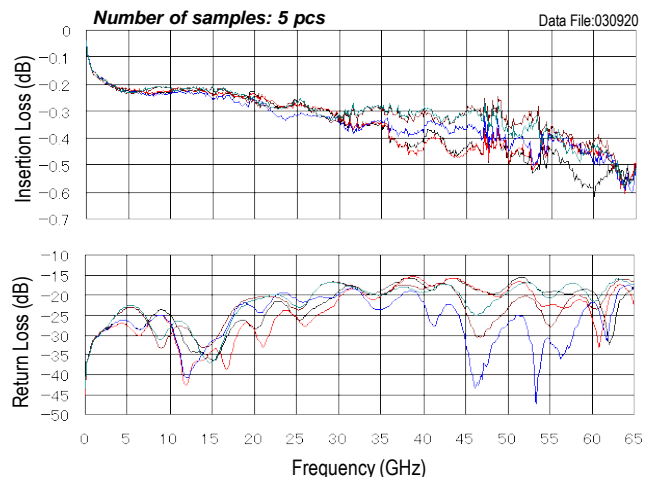
Production Status
 4 Weeks Lead-Time
 for Shipping

TYPE: KPC185FFHA 1.85 mm Female/1.85 mm Female

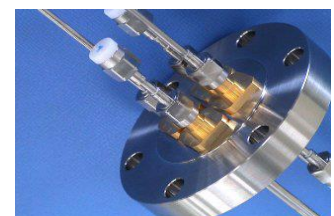
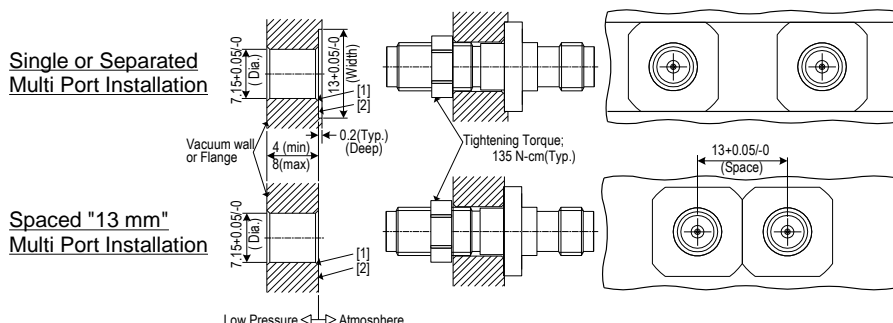


"T" : Vacuum wall or flange thickness:
 4 mm (min) to 8 mm (max)

Typical Performance



Recommended Mounting Hole and Installation



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

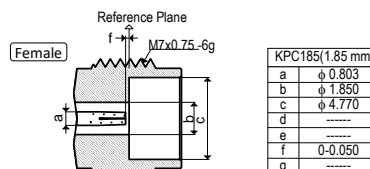
Interface Mating Dimensions of KPC185 (1.85 mm Connectors <*>)

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

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2.92 mm/2.92 mm 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
SWR
Insertion Loss
Electrical Length
Temperature Range

DC - 40 GHz
< 1.5
< 0.45 dB
Below (Nominal)
-55 to +125 °C

Mechanical:

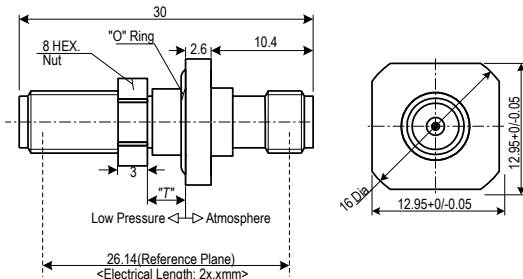
Body and Outer Conductor
Inner Conductor
Inner and Outer Conductor for Seal
Insulator for Seal
Gasket for Flange Seal
Coupling Torque
Connect/Disconnect Life
He Leak Rate (*)

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
< 1×10^{-10} Pam³/sec (< 1×10^{-9} atm cc/sec)



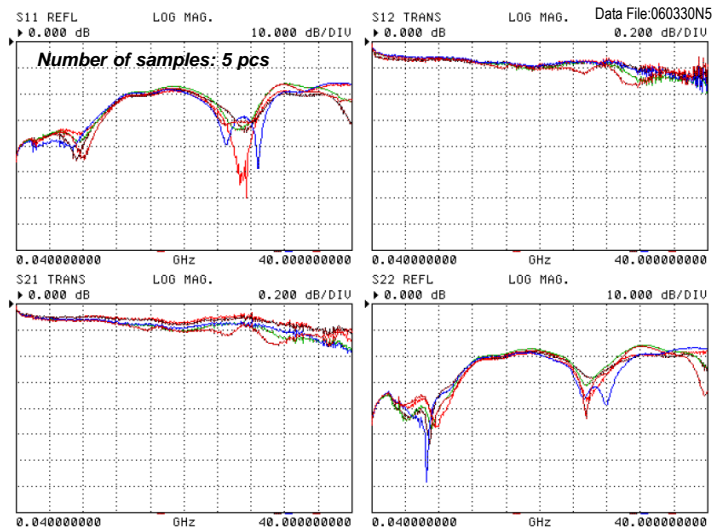
Production Status
4 Weeks Lead-Time
for Shipping

TYPE: KPC292FFHA 2.92 mm Female/2.92 mm Female

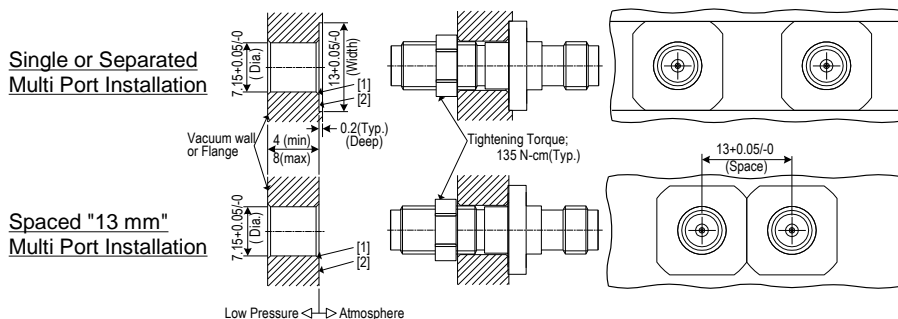


"T" : Vacuum wall or flange thickness:
4 mm (min) to 8 mm (max)

Typical Performance



Recommended Mounting Hole and Installation



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

NOTE:

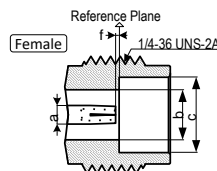
All dimensions are in millimeters.

[1] Chamfer: < 0.05 mm

[2] "Smooth surface" required

(*) As Per MIL-STD-883E, METHOD1014.10,

Test Condition A4



KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	-----
e	-----
f	0-0.050
g	-----

<*> Matable with 3.5 mm and SMA

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

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1 mm DC - 110 GHz, Flange Launchers

DESCRIPTION

"KPC100F311 and KPC100M311" flange launchers are designed for ultra-broadband devices and units with coaxial I/O interfaces.

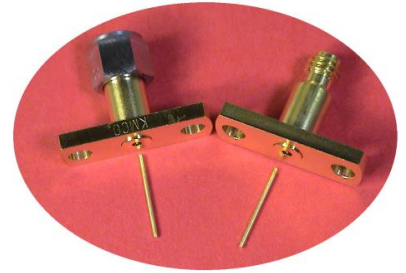
SPECIFICATIONS

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

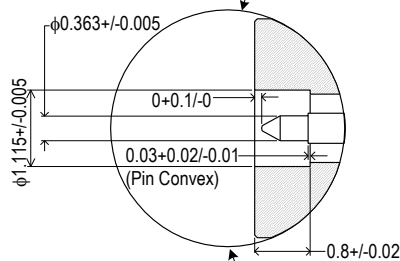
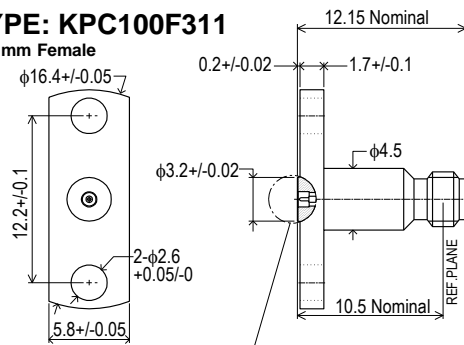
Mechanical:

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)



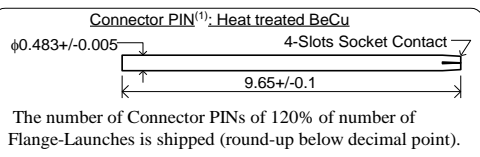
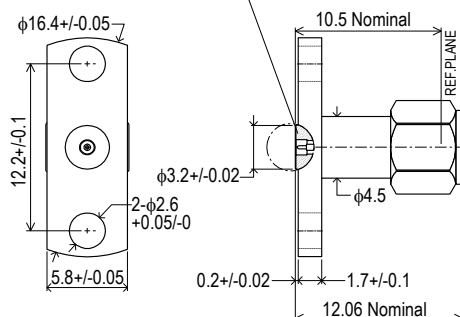
TYPE: KPC100F311

1 mm Female



TYPE: KPC100M311

1 mm Male

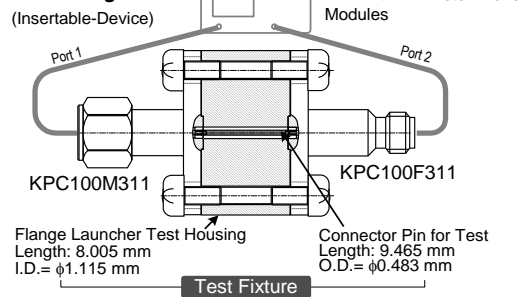


NOTE:

All dimensions are in millimeters.

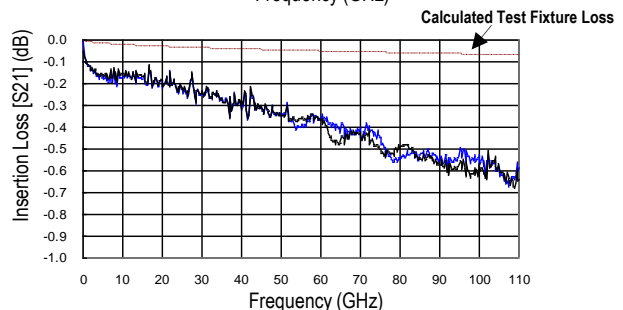
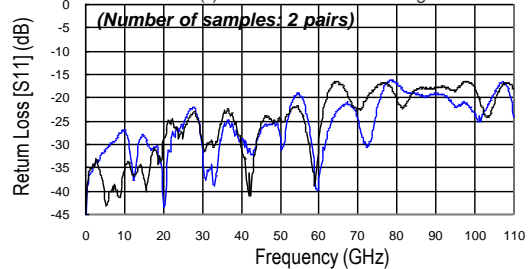
(1) The tip of the pin contacts with "pin convex" in a final assembly.

Standard Test Configuration

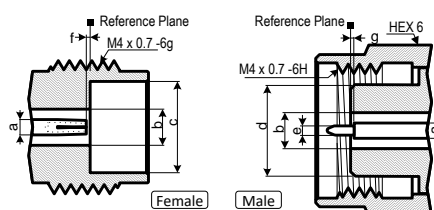


Typical Performance

Note: (*) As Standard Test Configuration



Interface Mating Dimensions of KPC100 (1 mm Connectors)



RoHS Compliant

REACH Compliant

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

Specifications Subject to Change Without Notice

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1.85 mm 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:

Frequency Range	DC - 65 GHz
SWR	< 1.5 (*)
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

Glass Bead

Electrical:

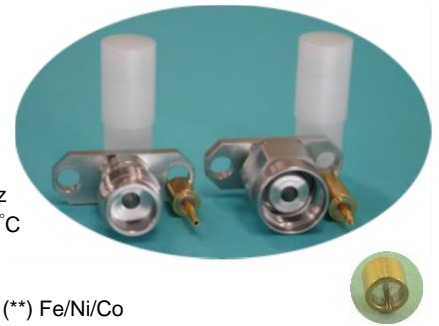
Frequency Range	DC - 65 GHz
Temperature Range	-55 to +125 °C

Mechanical:

Body and Inner Conductor	Gold Plated (**) Fe/Ni/Co Alloy (KOVAR)
Insulator	#7070 Glass (Corning)

Others:

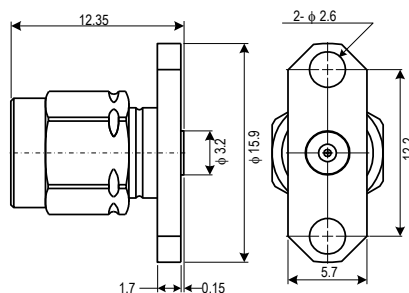
Soldering Temperature	330°C (max)
He Leak Rate	< 1x10 ⁻¹⁰ Pam ³ /sec



Production Status
2 Weeks Lead-Time
for Shipping

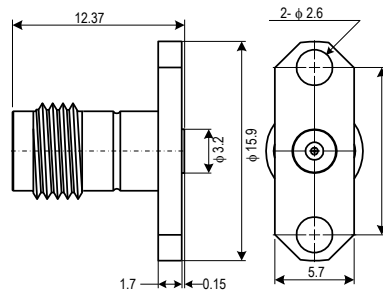
TYPE: KPC185M302

1.85 mm Male



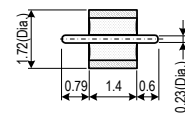
TYPE: KPC185F302

1.85 mm Female



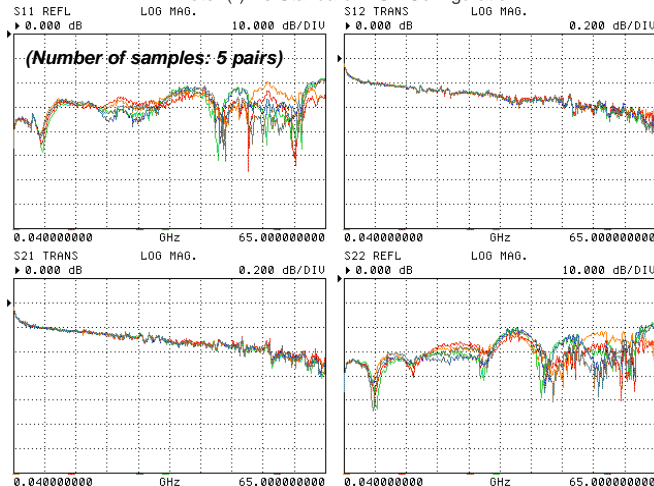
TYPE: GB185

Glass Bead

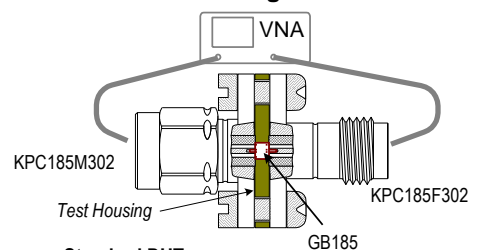


Typical Performance

Note: (*) As Standard DUT Configuration



Test Configuration



Standard DUT:

Cascaded KPC185M302, GB185, and KPC185F302

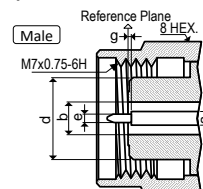
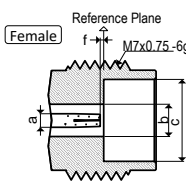
Interface Mating Dimensions of KPC185 (1.85 mm Connectors <*>)

NOTE:

All dimensions are in millimeters.

(**) Thermo-sonic wire bondable gold plating

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



<*> Matable with 2.4 mm connectors

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

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Rev. 03 June 2017

2.92 mm 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
Inner Conductor Gold Plated Beryllium
Copper and Brass
Coupling Torque 90 N-cm (Nominal)
Connect/Disconnect Life > 1,000 Cycles

Glass Bead

Electrical:

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

Mechanical:

Body and Inner Conductor Gold Plated (**) Fe/Ni/Co Alloy (KOVAR)
Insulator #7070 Glass (Corning)

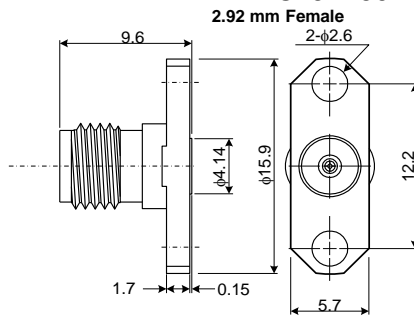
Others:

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



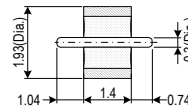
Production Status
2 Weeks Lead-Time
for Shipping

TYPE: KPC292F302



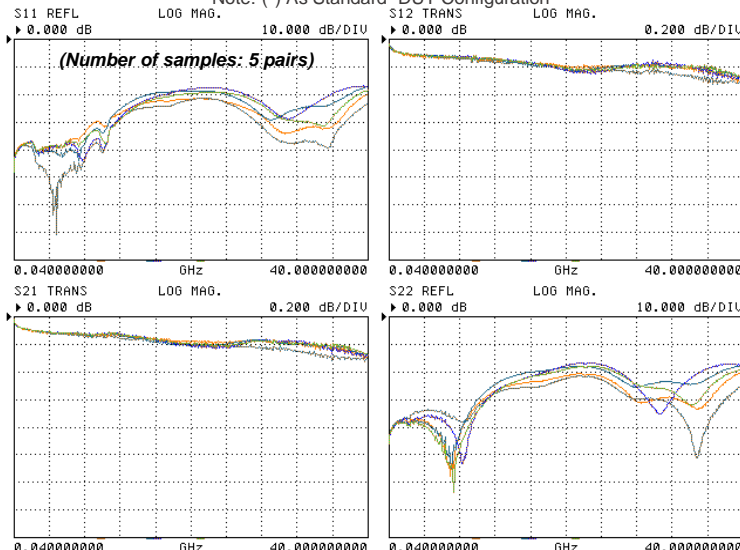
TYPE: GB292

Glass Bead

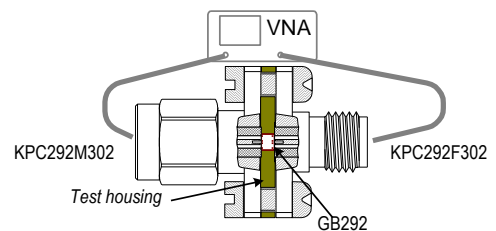


Typical Performance

Note: (*) As Standard DUT Configuration



Test configuration

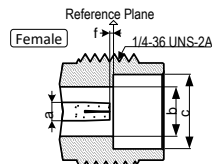


Standard DUT:

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

Interface Mating Dimensions of KPC292 (2.92 mm Connectors)

KPC292(2.92 mm)	
a	φ 1.270
b	φ 2.920
c	φ 4.640
d	-----
e	-----
f	0-0.050
g	-----



NOTE:

All dimensions are in millimeters.

(**) Thermo-sonic wire bondable gold plating

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

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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	1 mm	DC-110 GHz	> 17 dB	See Fig.1	-55 to +100 °C	30 to 300 mm +/-1 mm [*] (Over 301 mm: Negotiable)
CA100MF □□□□ Male/Female						
CA100MM □□□□ Male/Male						

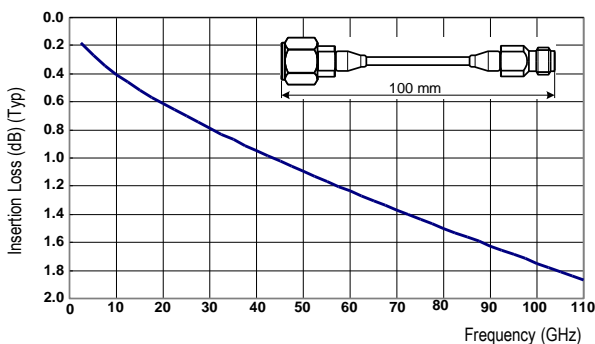


Fig.1 Frequency vs Insertion Loss, L=100 mm

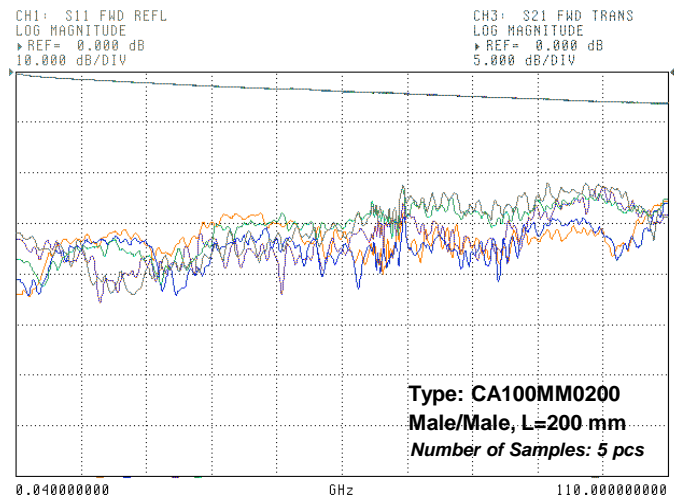
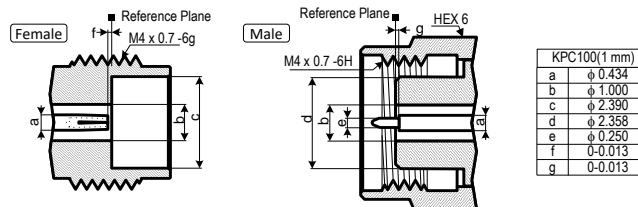


Fig. 2 Typical Performance

Interface Mating Dimensions of KPC100 (1 mm Connectors)



NOTE:
All dimensions are in millimeters.

RoHS Compliant

REACH Compliant

Specifications Subject to Change Without Notice

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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: □□□□ 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 □□□□ Female/Female	1.85 mm	DC-60 GHz	> 18 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*] (5 mm step): Standard (Over 300 mm: Negotiable)
CA185MF □□□□ Male/Female						
CA185MM □□□□ Male/Male						
CA240FF □□□□ Female/Female	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)
CA240MF □□□□ Male/Female						
CA240MM □□□□ Male/Male						
CA292FF □□□□ Female/Female	2.92 mm	DC-40 GHz	> 20 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*] (5 mm step): Standard (Over 300 mm: Negotiable)
CA292MF □□□□ Male/Female						
CA292MM □□□□ Male/Male						

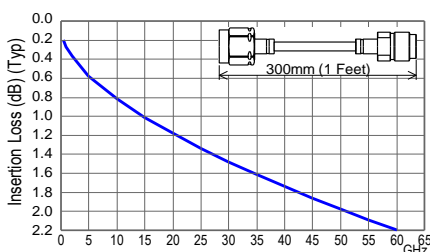


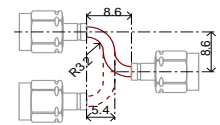
Fig.1 Frequency vs Insertion Loss, L=300 mm

---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

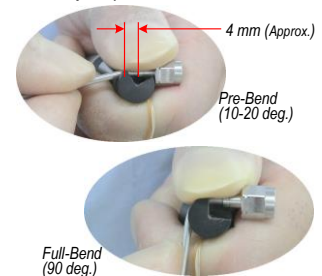
Reference for
Minimum Cable Installation Space
by Rounded Re-Forming



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.



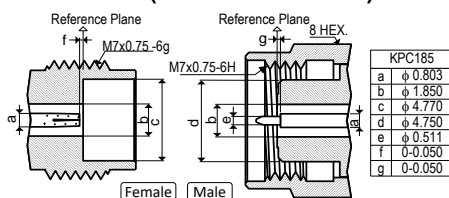
RoHS Compliant

REACH Compliant

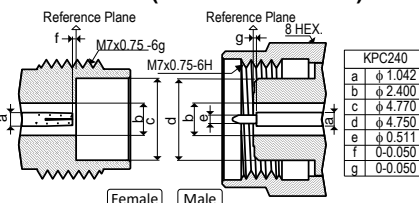
NOTE: All dimensions are in millimeters.

Connector Interface Mating Dimensions

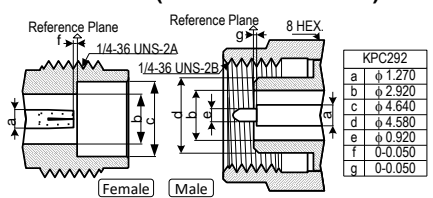
KPC185 (1.85 mm Connectors)



KPC240 (2.4 mm Connectors)



KPC292 (2.92 mm Connectors)



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Rev. 04 Oct 2019

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"**.

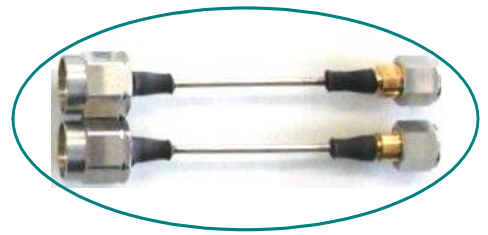
SPECIFICATIONS

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
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: CA185M100M0035 (Length: 35 mm)

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

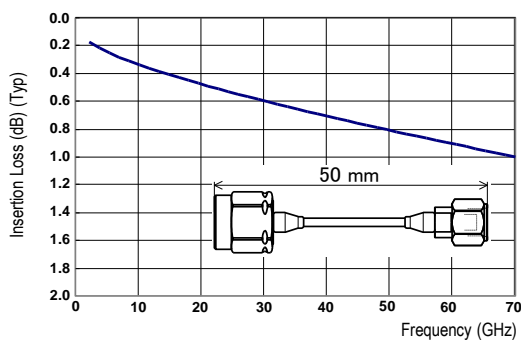


Fig.1 Estimated Insertion Loss, Including Adaptor

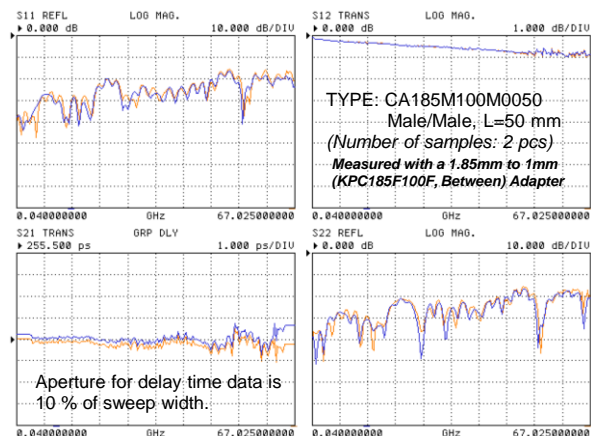
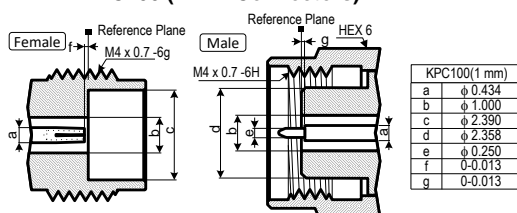


Fig.2 Typical Performance

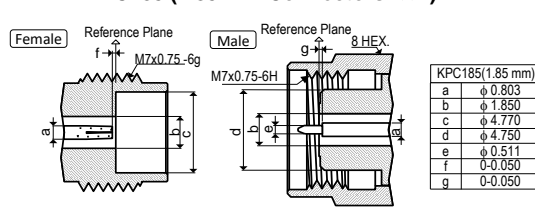
NOTE: All dimensions are in millimeters.

Connector Interface Mating Dimensions

KPC100 (1 mm Connectors)



KPC185 (1.85 mm Connectors <*>)



<*> Matable with 2.4 mm connectors

Specifications Subject to Change Without Notice

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RoHS Compliant

REACH Compliant

Re-Formable Semirigid Cable Assemblies, Between 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 Solid PTFE
Insulator 61 GHz (Approx.)
Moding Frequency 0.476 ns/100 mm
Delay Time 3.2 mm (min)
Inside Bending Radius "Non-Magnetic"



Production Status
2 Weeks Lead-Time
for Shipping

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

For example: CA240F185M0035 (Length: 35 mm)

TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)
CA240F185F	2.4 mm/ 1.85 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)
CA240F185M						
CA240M185F						
CA240M185M						
CA292F185F	2.92 mm/ 1.85 mm	DC-40 GHz	> 18 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*] (5 mm step): Standard (Over 300 mm: Negotiable)
CA292F185M						
CA292M185F						
CA292M185M						
CA292F240F	2.92 mm/ 2.4 mm	DC-40 GHz	> 18 dB	See Fig. 1	-55 to +100 °C	35 to 300 mm +/-2 mm [*] (5 mm step): Standard (Over 300 mm: Negotiable)
CA292F240M						
CA292M240F						
CA292M240M						

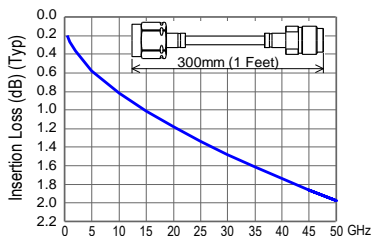


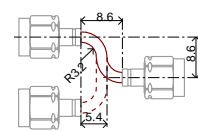
Fig.1 Frequency vs Insertion Loss, L=300mm

---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

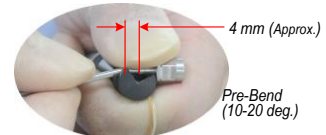


Hand Bender 2200
for Re-Forming (R3.2/7 mm)



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.

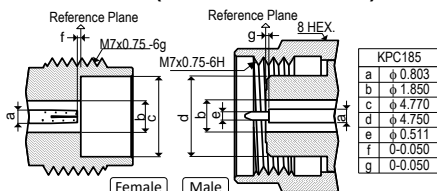


RoHS Compliant

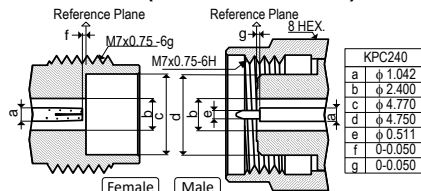
REACH Compliant

Connector Interface Mating

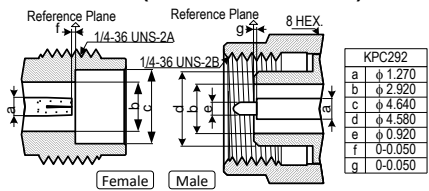
KPC185 (1.85 mm Connectors)



KPC240 (2.4 mm Connectors)



KPC292 (2.92 mm Connectors)



Specifications Subject to Change Without Notice

NOTE: All dimensions are in millimeters.

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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

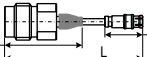
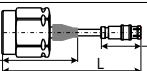
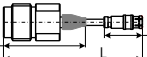
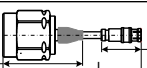
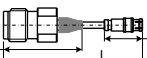
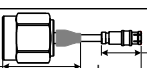
Outer Conductor	1.19 mm Diameter Copper with Cu/Sn/Zn Plated
Center Conductor	Silver Plated Copper
Insulator	PTFE
Moding Frequency	111 GHz (Approx.)
Delay Time	0.476 ns/100 mm
Inside Bending Radius	3 mm (min)
"Non-Magnetic"	



Production Status
2 Weeks Lead-Time for Shipping

[*] Please specify length (L: □□□□ 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 □□□□ Female/SMPM Female		1.85 mm /SMPM	DC-65 GHz	< 13 GHz: > 22 dB 13-48 GHz: > 16 dB 48-65 GHz: > 12 dB	See Fig. 1	-55 to +100 °C	25 to 300 mm +/-2 mm [*] (Over 300 mm: Negotiable)
CA185M119SMPM □□□□ Male/SMPM Female							
CA240F119SMPM □□□□ Female/SMPM Female		2.4 mm /SMPM	DC-50 GHz	< 13 GHz: > 22 dB 13-38 GHz: > 16 dB 38-50 GHz: > 13 dB			
CA240M119SMPM □□□□ Male/SMPM Female							
CA292F119SMPM □□□□ Female/SMPM Female		2.92 mm /SMPM	DC-40 GHz	< 13 GHz: > 22 dB 13-35 GHz: > 16 dB 35-40 GHz: > 13 dB			
CA292M119SMPM □□□□ Male/SMPM Female							

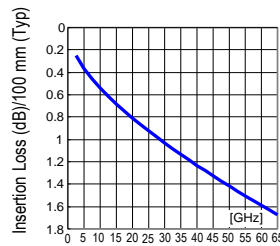
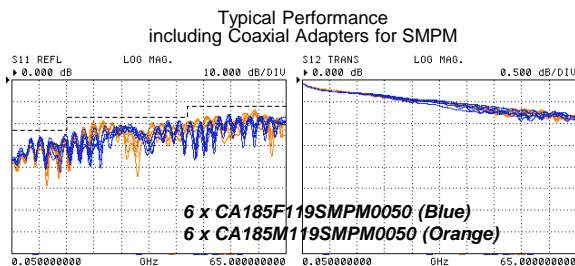
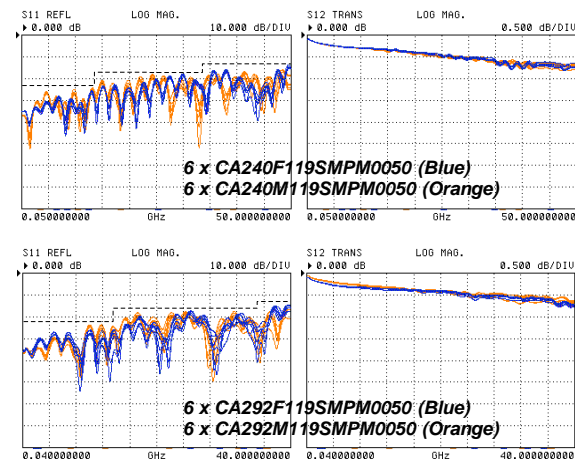


Fig.1 Frequency vs Insertion Loss

---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



RoHS Compliant

REACH Compliant

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.

Pre-Bend (10-20deg.)



Full-Bend (90 deg.)



Removal Tool for SMPM



Specifications Subject to Change Without Notice

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e-mail: sales@kmco.co.jp

Semi-Flexible Cable Assemblies, In-Series

Connector Interface 1 mm for DC - 110 GHz

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 use.

All materials are **"lead free"**.

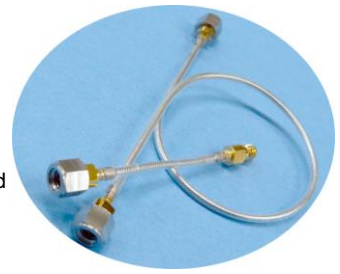
SPECIFICATIONS

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
TBD

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

For example: SFCA100MM0050 (Length: 50 mm)

TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)
SFCA100FF □□□□ Female/Female	1 mm	DC-110 GHz	> 15 dB	See Fig. 1	-30 to +100 °C	30 to 150 mm +/-1 mm [*] (Over 150 mm: Negotiable)
SFCA100MF □□□□ Male/Female						
SFCA100MM □□□□ Male/Male						

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

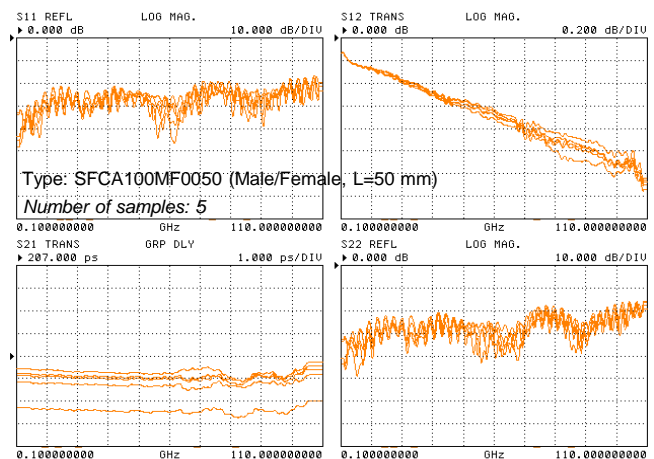
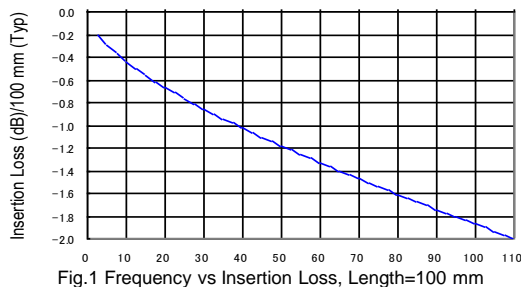
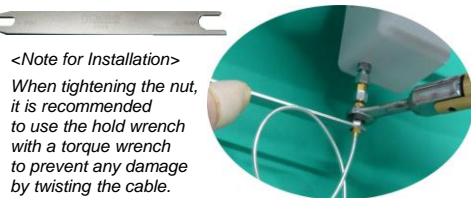
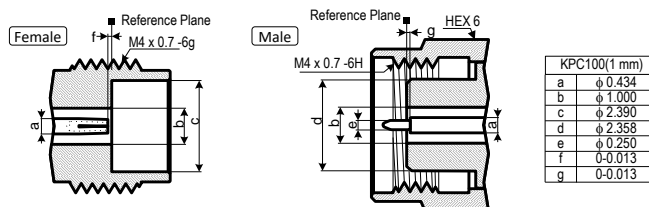


Fig.2 Typical Performance

Hold Wrench #3555



Interface Mating Dimensions of KPC100 (1 mm Connectors)



RoHS Compliant

REACH Compliant

NOTE: All dimensions are in millimeters.

Specifications Subject to Change Without Notice

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KMCO
ISO9001:14001 Certified

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Preliminary

Semi-Flexible Cable Assemblies

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"	



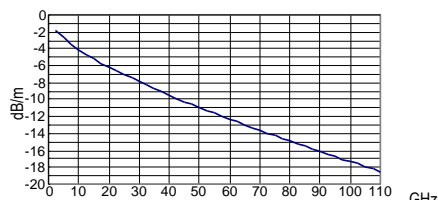
Production Status
2 Weeks Lead-Time
for Shipping

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

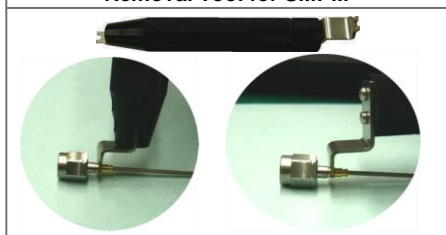
For example: **SFCA185MM0035** (Length: 35 mm)

SFCA185MM0035J (Length: 35 mm, with Jacket)

TYPE	Connector Interface	Frequency Range	Return Loss	Insertion Loss	Temperature Range	Length (L)	With Jacket
SFCA185119FF □□□□ Female/Female	1.85 mm	DC-65 GHz (Within)	> 17 dB	See Fig. 1	-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)
SFCA185119MF □□□□ Male/Female							
SFCA185119MM □□□□ Male/Male							
SFCA292119FF □□□□ Female/Female	2.92 mm	DC-40 GHz (Within)	> 17 dB	See Fig. 1	-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)
SFCA292119MF □□□□ Male/Female							
SFCA292119MM □□□□ Male/Male							
SFCA292F119185F □□□□ Female/Female	2.92 mm / 1.85 mm	DC-40 GHz (Between)	> 17 dB	See Fig. 1	-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)
SFCA292M119185F □□□□ Male/Female							
SFCA292F119185M □□□□ Female/Male							
SFCA292M119185M □□□□ Male/Male	1.85 mm / SMPM [1]	DC-65 GHz (Between)	< 13 GHz: > 22 dB 13-48 GHz: > 16 dB 48-65 GHz: > 12 dB	See Fig. 1	-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)
SFCA185F119SMPM □□□□ Female/Female							
SFCA185M119SMPM □□□□ Male/Female							
SFCA292F119SMPM □□□□ Female/Female	2.92 mm / SMPM [1]	DC-40 GHz (Between)	> 16 dB	See Fig. 1	-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)
SFCA292M119SMPM □□□□ Male/Female							



Removal Tool for SMPM

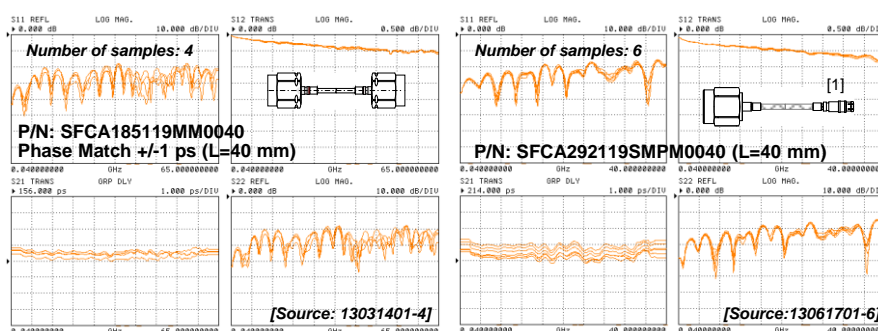


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Typical Performance



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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