

Company Profile

Established in 2012, Signity RF Solutions is one of the distinguished business firm involved in manufacturing, trading, importing and supplying of High Frequency Cable, Connector, Adaptor, Antenna, and other IBS, BTS Product .Fabricated with supremacy, these presented products are immensely credited in the industry due to their longer life, perfect designs and durable finish standards.. Valued among our patrons, these products could be acquired from us at pocket-friendly rates. Additionally, to eradicate all the faults present in the consignment, these are well-examined on assorted restrictions of quality before shipment. We import from countries like China and Taiwan.

This Specific Catalogue enlisted High Frequency Adaptor, Test Cable, Attenuator, Dummy load and their respective specification.

Designed for a wide range of use in the microwave industry, these adaptors are manufactured with a precise tolerance interface to ensure a superior repeatability and high mechanical stability. This Adaptor allows for conversion between two different RF interconnect series, gender conversions, gender extensions, and orientation transformation. Applications include military, IoT, 5G, satellite, high speed, aerospace, commercial and telecommunications.

In – Series Adaptor

In series adapters allow for gender conversions (i.e. male to female) or gender extensions (i.e. male to male or female to female) and orientation transformation (i.e. straight to right angle) within the same RF connector series at each end. Frequency ranges from DC to 110 GHz.

Between – Series Adaptor

Between series adapters enable a conversion between two different RF interconnect series, including SMA, 2.92mm, 2.4mm, SMP, SMPM and more, between different connector genders (i.e. male to female, male to male and female to female), and orientation transformations (i.e. straight to right angle). These Between Series Adapters are ideal for Test & Instrumentation applications. Frequency ranges from DC to 110 GH

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Adapters SMA

SMA Precision coaxial connector for microwave applications the maximum frequency is 26.5GHz.

- Design in accordance with: MIL-STD-348

Standard materials and finish

- Center conductor:beryllium copper,gold plated
- Insulator:PTFE
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-26.5GHz
- VSWR: DC-18GHz,1.10:1
max 18-26.5GHz,1.15:1 max
- Insulation resistance: 5000MΩ min
- Test voltage:1000V

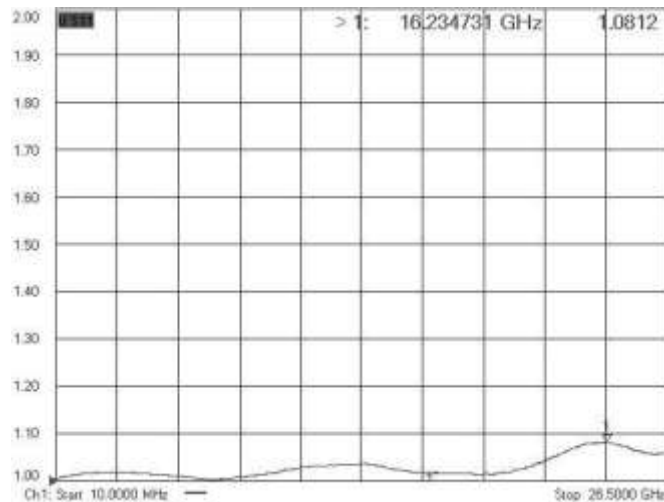
Mechanical

- Coupling torque:1.69N•m max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C~+155°C

Typical Test Date

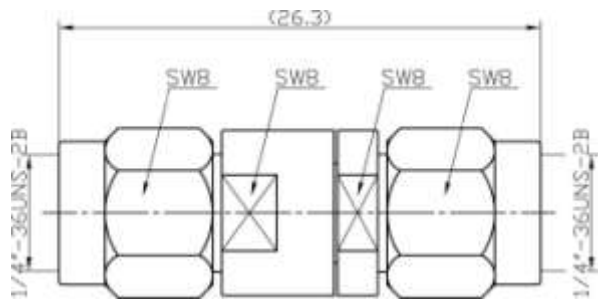
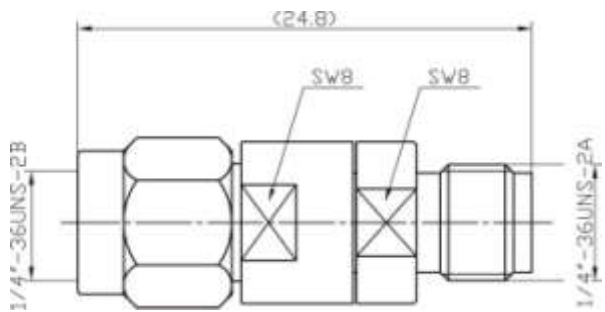


SMA(M)/SMA(M) Straight Adapter

SMA(M)/SMA(F)

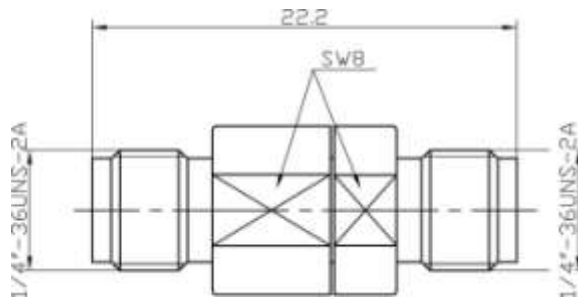
Straight Adapter

SMA-JKG



SMA(F)/SMA(F)

SMA-KKG



Adapter N

N Precision coaxial connector for microwave applications.the maximum frequency is 18GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

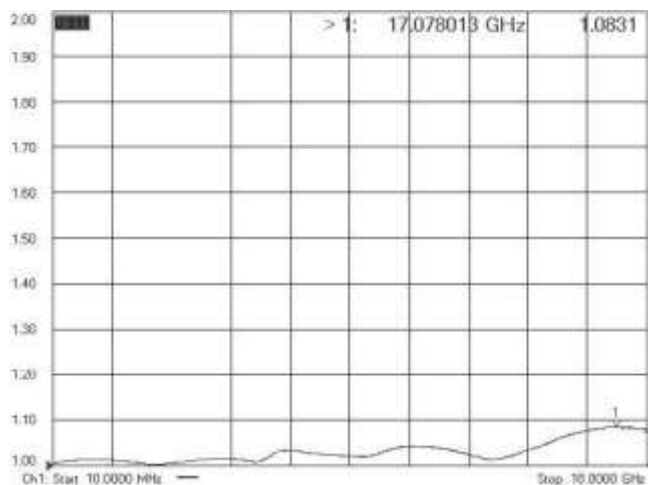
Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-18GHz
- VSWR: 1.10:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1500V

Mechanical Characteristics

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental



Temperature range: -55°C~+155°C

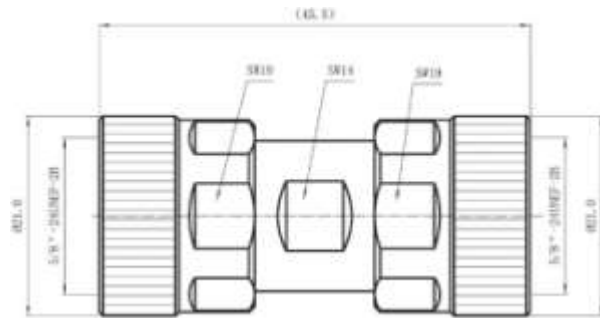
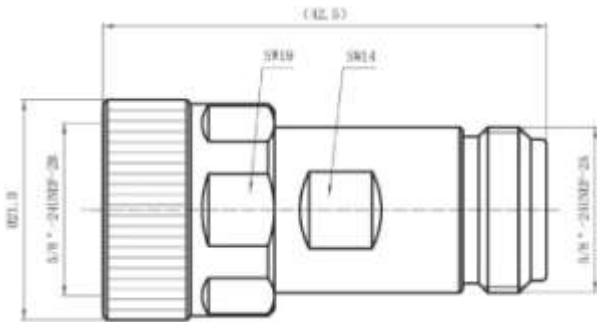
Typical Test Date

N(M)/N(F) Straight Adapter N-JKG

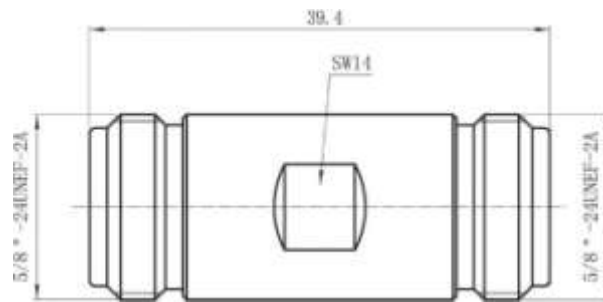
N(M)/N(M)

Straight

Adapter N-JJG



N(F)/N(F) Straight Adapter N-KKG



Adapter 3.5mm

3.5 Precision coaxial connector for microwave applications the maximum frequency is 26.5GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-26.5GHz
- VSWR: 1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C ~ +155°C



Typical Test Date
3.5(M)/3.5(M)

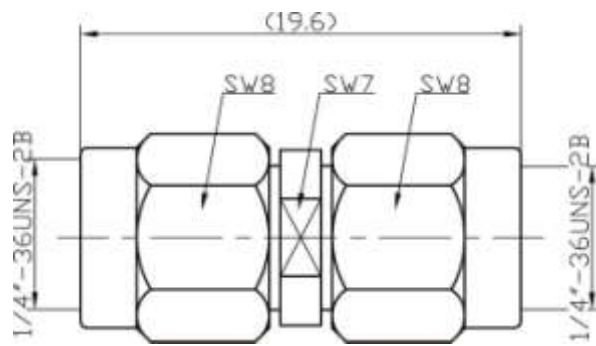
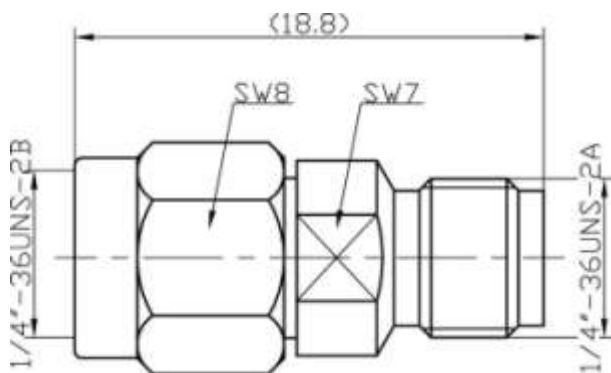
3.5-JJG



3.5(M)/3.5(F)

Straight Adapter

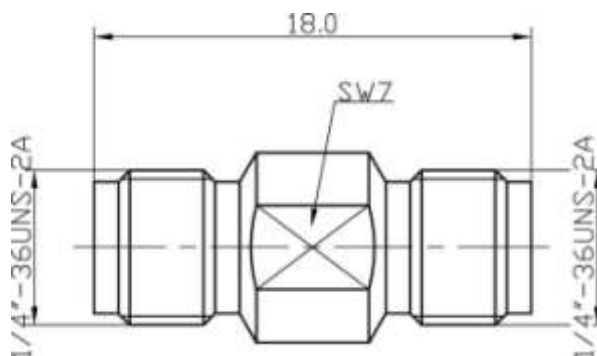
3.5-JKG



3.5(F)/3.5(F)

Straight Adapter

3.5-KKG



Adapter 2.92mm

2.92 Precision coaxial connector for microwave applications.the maximum frequency is 40GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

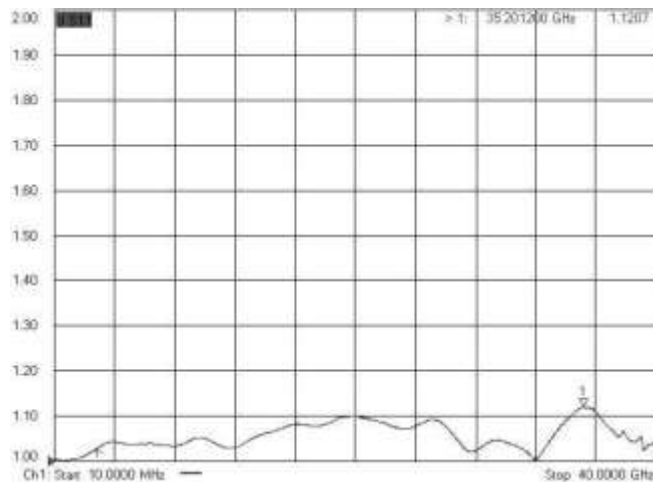
Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-40GHz
- VSWR:1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental



Temperature range: -55°C~+155°C

Typical Test Date
2.92(M)/2.92(F)

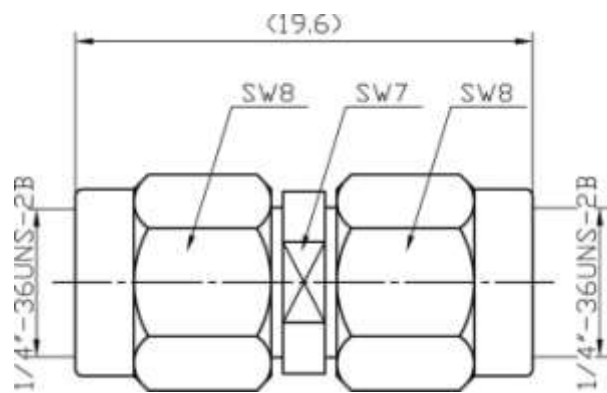
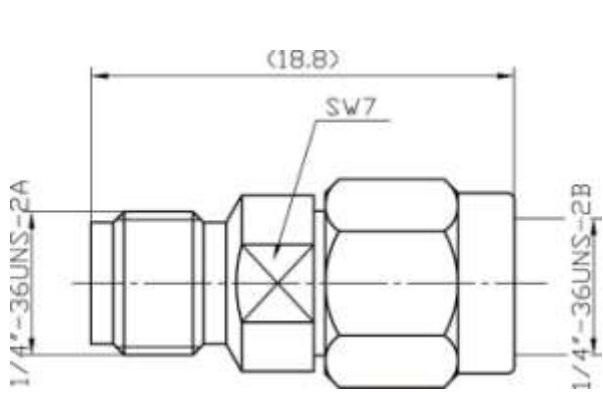
Straight Adapter

2.92-JKG

2.92(M)/2.92(M)

Straight Adapter

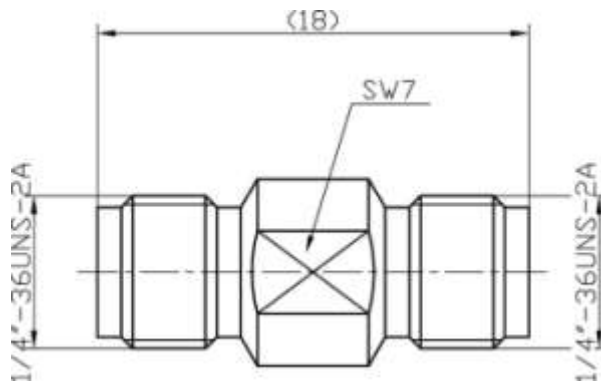
2.92-JJG



2.92(F)/2.92(F)

Straight Adapter

2.92-KKG



Adapter 2.4mm

2.4 Precision coaxial connector for microwave applications.the maximum frequency is 50GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-50GHz
- VSWR:1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:500V

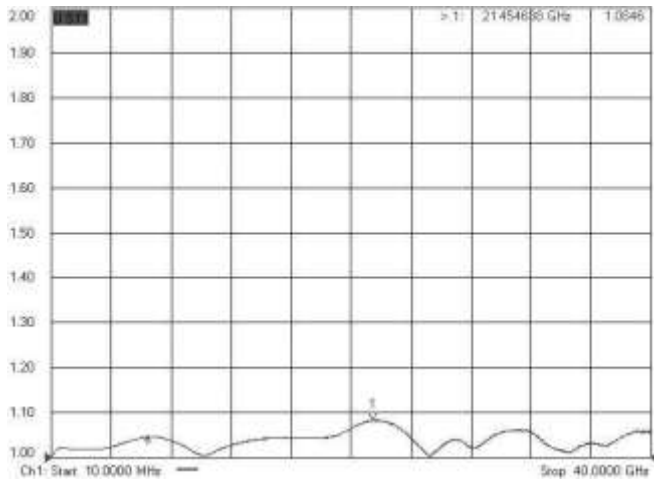
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C ~ +155°C

Typical Test Date



2.4(M)/2.4(F)

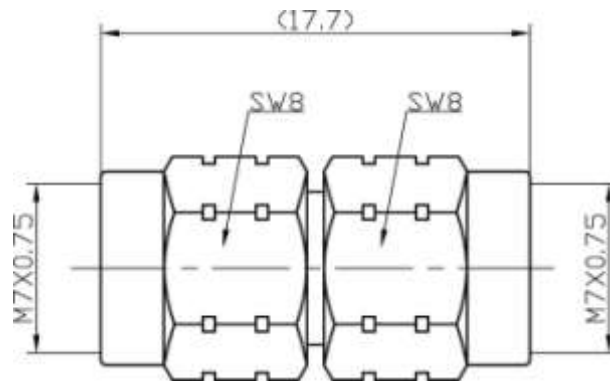
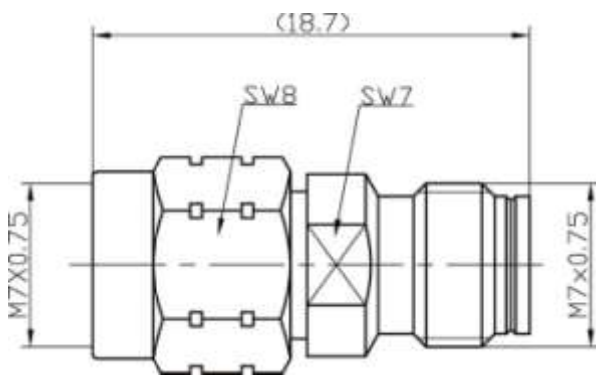
Straight Adapter

2.4-JKG

2.4(M)/2.4(M)

Straight Adapter

2.4-JJG

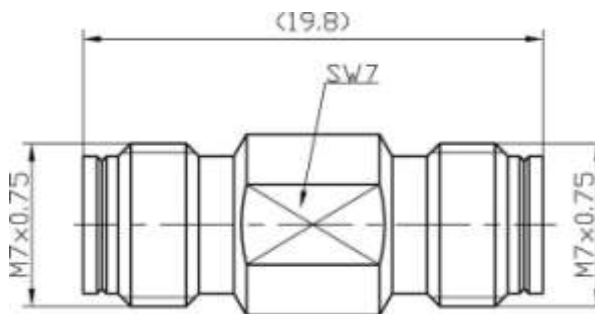


2.4(F)/2.4(F)

Straight Adapter



2.4-KKG



Adapter N/SMA

N/SMA Precision coaxial connector for microwave applications.the maximum frequency is 18GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PTFE
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-18GHz
- VSWR:1.10:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

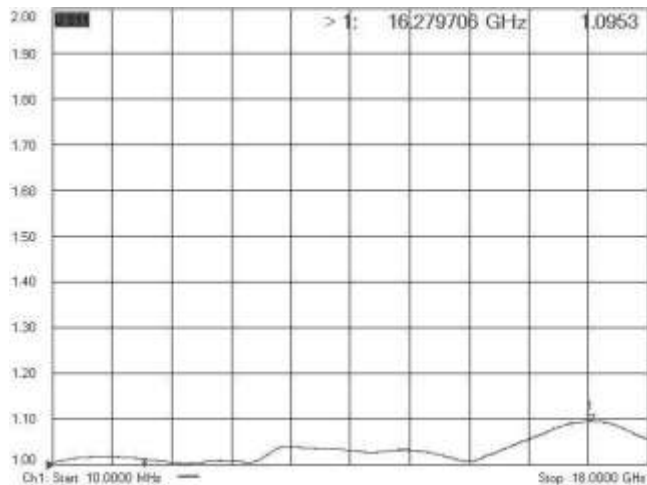
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C ~+155°C

Typical Test Date



N(M)/SMA(M)

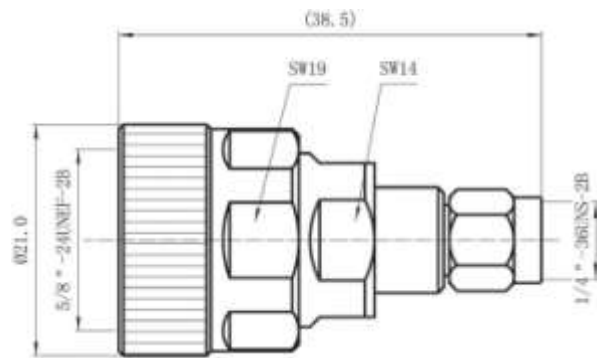
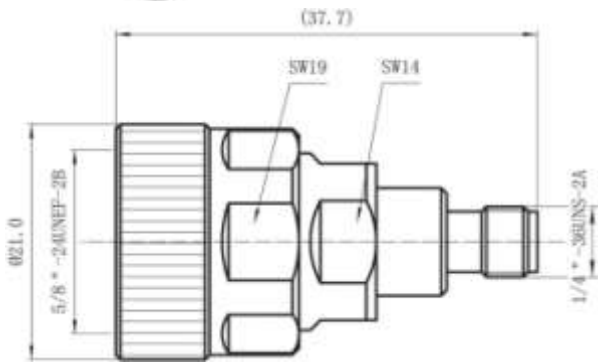
Straight Adapter

N/SMA-JJG

N(M)/SMA(F)

Straight Adapter

N/SMA-JKG

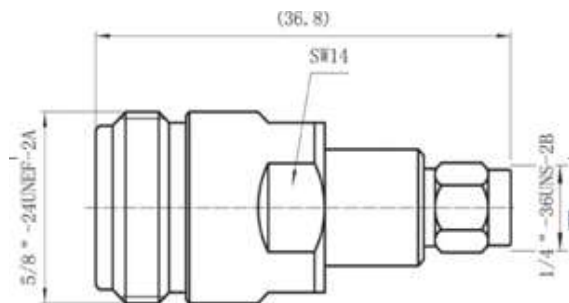
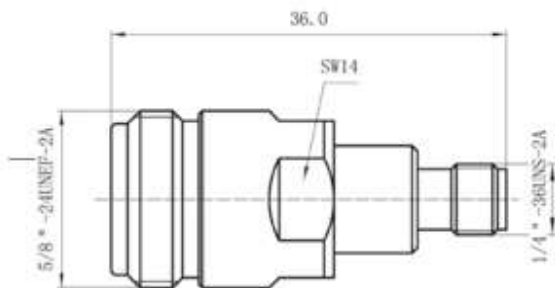


N(F)/SMA(F)

N/SMA-KKG

N(F)/SMA (M)

N/SMA-KJG



Adapter N/3.5mm

N/3.5 Precision coaxial connector for microwave applications.the maximum frequency is 18GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-18GHz
- VSWR:1.10:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

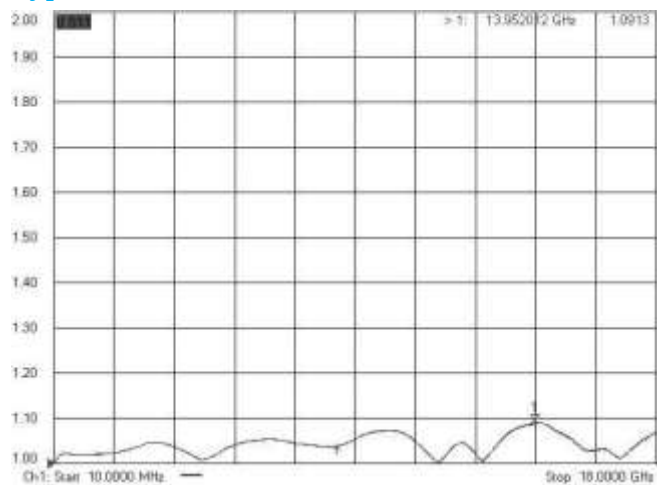
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C ~+155°C

Typical Test Date

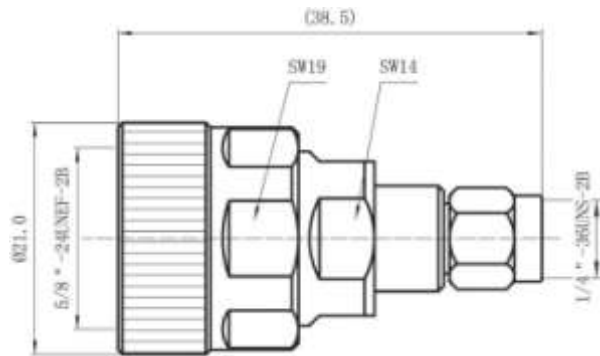
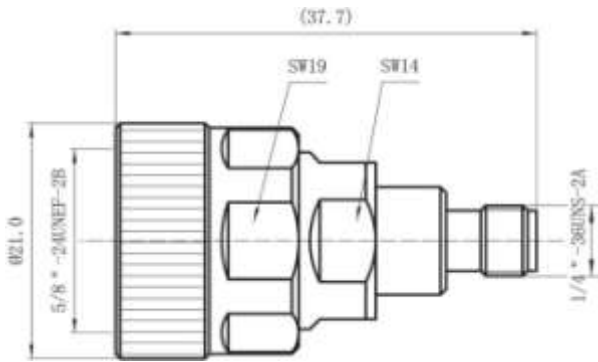


N(M)/3.5(M)

N/3.5-JJG

N(M)/3.5(F)

N/3.5-JKG

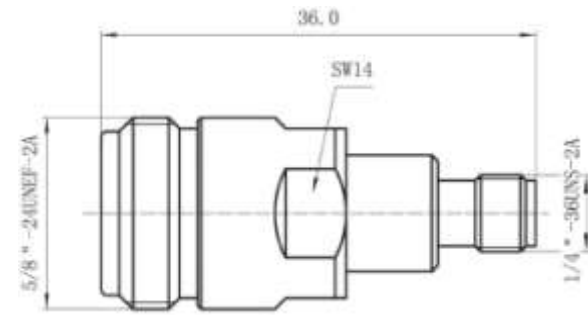
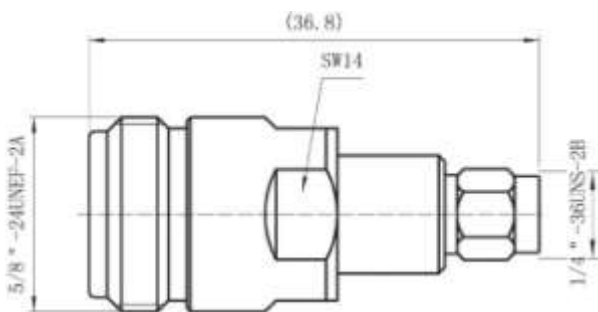


N(F)/3.5(M)

N/3.5-KJG

N(F)/3.5(F)

N/3.5-KKG



Adapter 3.5mm/2.92mm

3.5/2.92 Precision coaxial connector for microwave applications.the maximum frequency is 26.5GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-26.5GHz
- VSWR: 1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

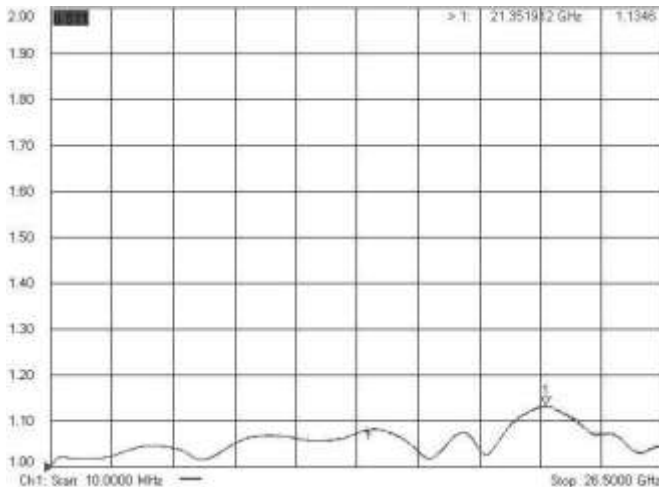
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C~+155°C

Typical Test Date

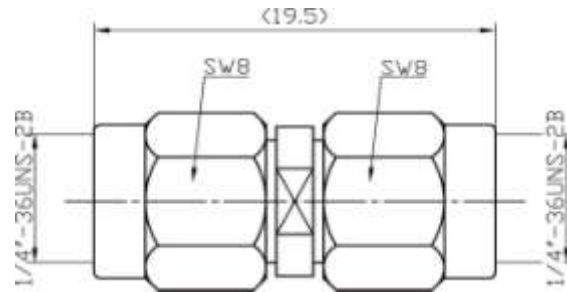
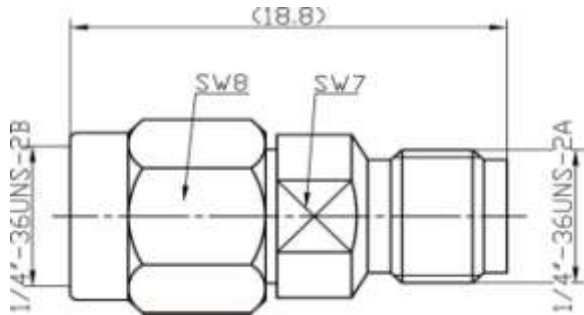


3.5(M)/2.92(M) Straght Adapter

3.5/2.92-JJG

3.5(M)/2.92(F) Straight Adapter

3.5/2.92-JKG

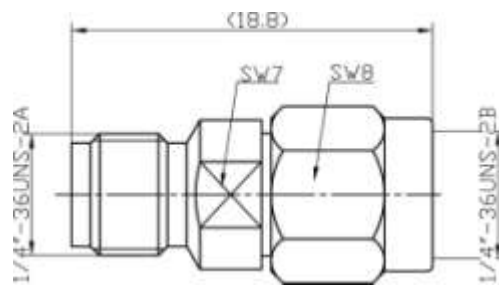
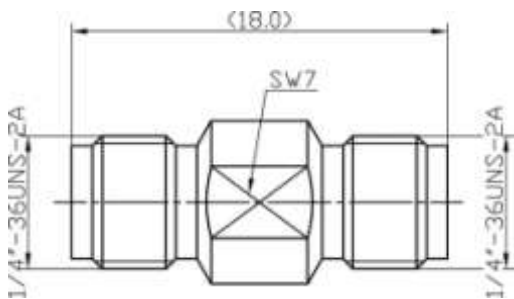


3.5(F)/2.92(M)

3.5/2.92-KJG

3.5(F)/2.92(F)

3.5/2.92-KKG



Adapter 3.5mm/2.4mm

3.5/2.4 Precision coaxial connector for microwave applications.the maximum frequency is 26.5GHz.

•Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-26.5GHz
- VSWR: 1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

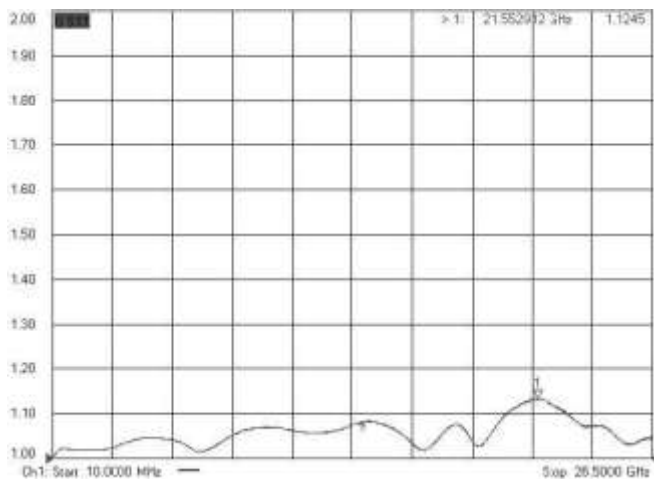
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C~+155°C

0Typical Test Date

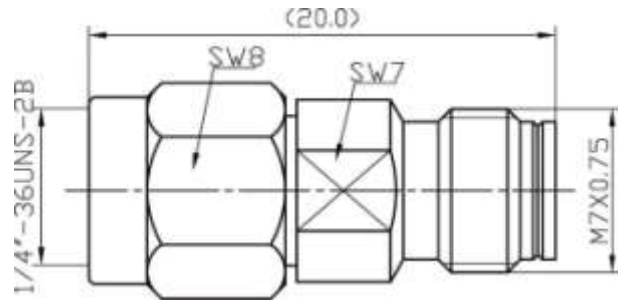
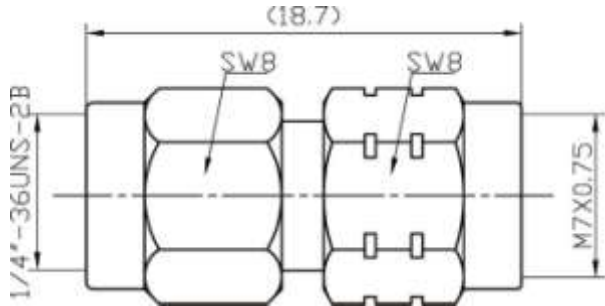


3.5(M)/2.4(M)

3.5/2.4-JJG

3.5(M)/2.4(F) Straight Adapter

3.5/2.4-JKG

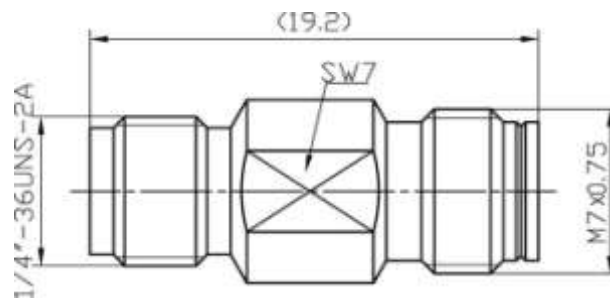
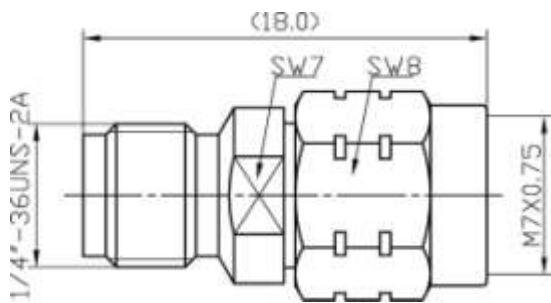


3.5(F)/2.4(F)

3.5/2.4-KKG

3.5(F)/2.4(M)

3.5/2.4-KJG



Adapter 2.92mm/2.4mm

2.92/2.4 Precision coaxial connector for microwave applications
themaximum frequency is 40GHz.

- Design in accordance with: IEEE Std 287™-2007

Standard materials and finish

- Center conductor:beryllium copper, gold plated
- Insulator:PEI
- Outer conductor:Stainless steel,Passivated

Electrical Characteristics

- Characteristic Impedance:50Ω
- Frequency range:DC-40GHz
- VSWR:1.15:1 max
- Insulation resistance: 5000MΩmin
- Test voltage:1000V

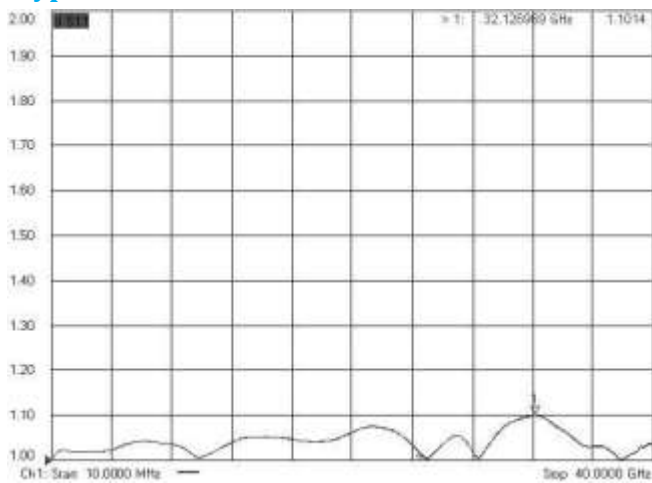
Mechanical

- Coupling torque:1.69N• max
- Mating cycles: 1000cycles min

Environmental

- Temperature range: -55°C ~ +155°C

Typical Test Date

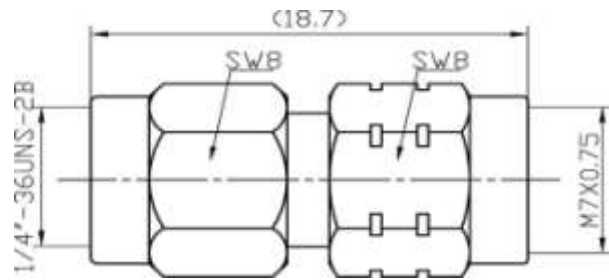
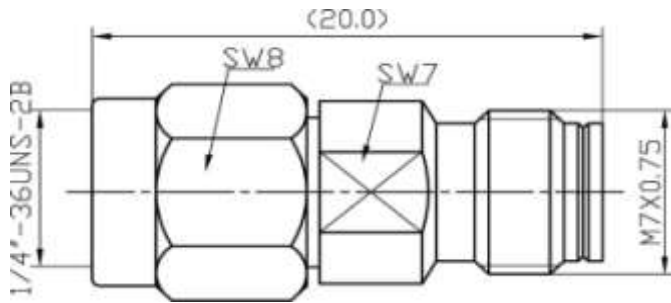


2.92(M)/2.4(M)

2.92/2.4-JJG

2.92(M)/2.4(F)

2.92/2.4-JKG



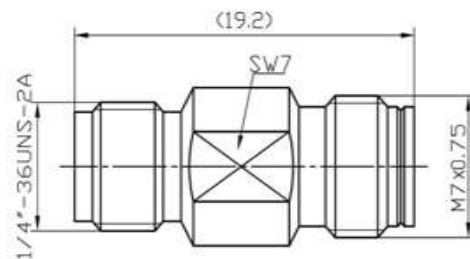
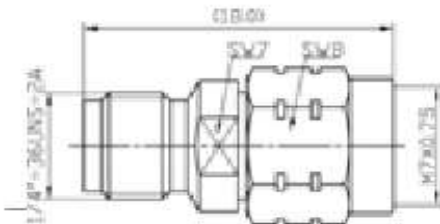
2.92(F)/2.4(M)

2.92/2.4-KJG

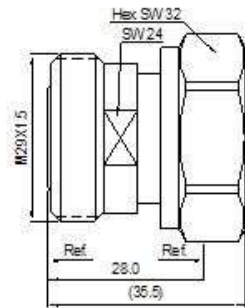
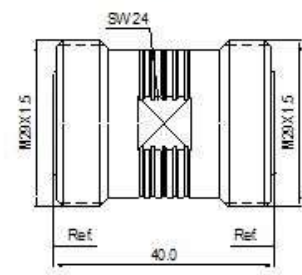
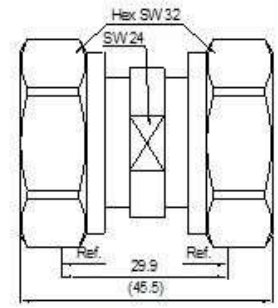
2.92(F)/2.4(F)



2.92/2.4-KKG



Adapters for PIM



Part NO.	Interface		Impedance Ω	Intermodulation
	Side A	Side B		2 x 43 dBm carrier
	7/16 male	7/16 male	50	$\leq -165\text{dBc}$
	7/16 female	7/16 female	50	
	7/16 female	7/16 male	50	

Piece Parts	Material	Surface Plating
Center Contact	Phosphor Bronze (A5056)	Ag
	Beryllium Copper (A5057 A5095)	
Body	Phosphor Bronze	Ag
Coupling Nut	SUS 303F	Passivated
Insulator	PTFE	-

Test Cable 18GHz



NM/NM-A



NM/SMA

Product Data						
Part Number	Description		Insertion loss (dB) 25 °C			
	Connectors	Cable Length	up to 3GHz	3 to 6GHz	6 to 12GHz	12to 18GHz
NM/NM-A	N, Male, Straight / N, Male, Straight	1000mm	< 0.85	< 1.2	< 1.7	< 2.2
NM/SMAM-A	N, Male, Straight / SMA, Male, Straight	1000mm	< 0.85	< 1.2	< 1.7	< 2.2

Electrical Data				
Impedance	50	Ω		
Operating frequency	18	GHz		
Insulation resistance	≥5000	MΩ		
Dielectric withstand voltage AC r.m.s	≤1500	V		
Capacitance	96.4	pF/m		
Velocity of propagation	70%			
Shielding effectiveness	> -90	dB		
VSWR	up to 3GHz	3 to 6GHz	6 to 12GHz	12to 18GHz
NM/NM-A	<1.1	<1.1	<1.15	<1.15
NM/SMAM-A	<1.1	<1.1	<1.15	<1.15
Mechanical Data				
Min. bending radius dynamic	50	mm		
Recommended mating torque	0.7~1.1	Nm		
Environmental Data				
Operating temperature	-55°C to +85°C			
2002/95/EC (ROHS)	compliant			
Material Data				
Piece Parts	Material		Surface Plating	
center contact	Beryllium copper		Au	
body	Stainless steel		Passivated	
coupling nut	Stainless steel		Passivated	
insulator	PTFE		-	

Test Cable 18GHz (Armor)



NM/NM-L-B



NM/SMAM-L-B

Product Data						
Part Number	Description		Insertion loss (dB) 25 °C			
	Connectors	Cable Length	up to 3GHz	3 to 6GHz	6 to 12GHz	12 to 18GHz
NM/NM-B	N, Male, Straight / N, Male, Straight	1000mm	< 0.85	< 1.2	< 1.7	< 2.2
NM/SMAM-B	N, Male, Straight / SMA, Male, Straight	1000mm	< 0.85	< 1.2	< 1.7	< 2.2

Electrical Data				
Impedance	50	Ω		
Operating frequency	18	GHz		
Insulation resistance	≥5000	MΩ		
Dielectric withstand voltage AC r.m.s	≤1500	V		
Capacitance	96.4	pF/m		
Velocity of propagation	70%			
Shielding effectiveness	> -90	dB		
VSWR	up to 3GHz	3 to 6GHz	6 to 12GHz	12 to 18GHz
NM/NM-B	<1.1	<1.1	<1.15	<1.15
NM/SMAM-B	<1.1	<1.1	<1.15	<1.15
Mechanical Data				
Min. bending radius dynamic	50	mm		
Recommended mating torque	0.7~1.1	Nm		
Environmental Data				
Operating temperature	-55 °C to +85 °C			
2002/95/EC (ROHS)	compliant			
Material Data				
Piece Parts	Material		Surface Plating	
center contact	Beryllium copper		Au	
body	Stainless steel		Passivated	
coupling nut	Stainless steel		Passivated	
insulator	PTFE		-	

Test Cable Assemblies



NM/NM-C

NM/SMAM-C

Product Data				
Part Number	Description		Insertion loss (dB) 25 °C	
	Connectors	Cable Length	up to 3GHz	3 to 6GHz
NM/NM-C	N, Male, Straight / N, Male, Straight	1000mm	<0.85	<1.25
NM/SMAM-C	N, Male, Straight / SMA, Male, Straight	1000mm	<0.85	<1.25

Electrical Data				
Impedance	50	Ω		
Operating frequency	6	GHz		
Insulation resistance	≥5000	MΩ		
Dielectric withstand voltage AC r.m.s	≤1500	V		
Capacitance	96.4	pF/m		
Velocity of propagation	70%			
Shielding effectiveness	> -90	dB		
VSWR	up to 3GHz		3 to 6GHz	
NM/NM-C	<1.1		<1.15	
NM/SMAM-C	<1.1		<1.15	
Mechanical Data				
Min. bending radius dynamic	50	mm		
Recommended mating torque	0.7~1.1	Nm		
Environmental Data				
Operating temperature	-55 °C to +85 °C			
2002/95/EC (ROHS)	compliant			
Material Data				
Piece Parts	Material	Surface Plating		
center contact	Beryllium copper	Au		
body	Brass	CuSnZn		
coupling nut	Brass	CuSnZn		
insulator	PTFE	-		

Test Cable IMD



IMD-7/16-A1



IMD-7/16-A2



IMD-7/16-A3

Product Data	
Part Number	Description
IMD-7/16-A1	7/16, Male, Straight / 7/16, Male, Straight
IMD-7/16-A2	7/16, Male, Straight / 4310, Male, Straight
IMD-7/16-A3	7/16, Male, Straight / N, Male, Straight

Electrical Data			
Impedance	50	Ω	
Operating frequency	3	GHz	
PIM	$\leq -125\text{dBm}$ (2x43dBm carriers)		
Insulation resistance	≥ 10000	M Ω	
Dielectric withstand voltage AC	≤ 25000	V r.m.s	(C5507.39/C5510.39)
	≤ 20000	V r.m.s	(C5543.39)
VSWR	≤ 1.10 (upto3GHz)		
Mechanical Data			
Mating cycles	≥ 500		
Minimum bend radius ,Multiple bends Number bends,Minimum	50	mm	
	20		
Recommended mating torque	25~30	Nm	7/16
	0.7~1.1	Nm	N
Environmental Data			
Operating temperature	-55 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$		
2002/95/EC (ROHS)	Compliant		
Material Data			
Piece Parts	Material	Surface Plating	
center contact	Beryllium copper	Silver	
body	Brass	Silver	
coupling nut	Stainless steel (N)	Passivated	
	Brass (7/16)	CuSnZn	
insulator	PTFE	-	

Test Cable 26.5GHz

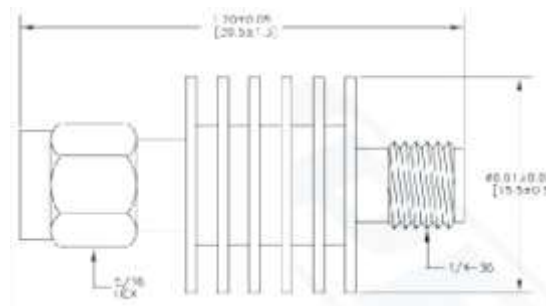


26.5G-
PC3.5MPC3.5M-A

Product Data							
Part Number	Description		Insertion loss (dB) 25 °C				
	Connector	Cable length	up to 1GHz	1 to 3GHz	3 to 5GHz	5 to 10GHz	10 to 20GHz
26.5G-PC3.5MPC3.5M-A	PC 3.5, Male, Straight	1000mm	< 0.64	< 1.26	< 1.51	< 2.22	<3.29

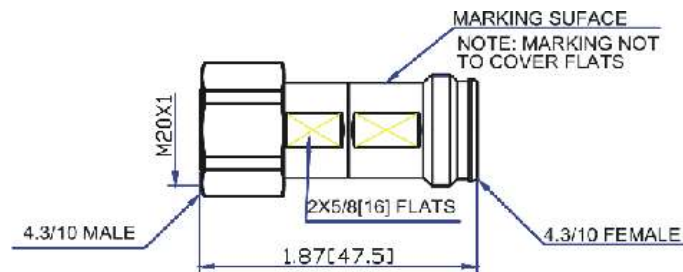
Electrical Data		
Impedance	50 Ω	
Operating frequency	26.5 GHz	
Insulation resistance	≥5000 MΩ	
Dielectric withstand voltage AC r.m.s	≤1500 V	
Capacitance	96.4 pF/m	
Velocity of propagation	70%	
Shielding effectiveness	> -90 dB	
Insertion Loss	≤-24.3dB(up to 26.5GHz)	
Mechanical Data		
Min. bending radius dynamic	50 mm	
Recommended mating torque	0.7~1.1 Nm	
Environmental Data		
Operating temperature	-55°C to +85°C	
2002/95/EC (ROHS)	compliant	
Material Data		
Piece Parts	Material	Surface Plating
center contact	Brass	Au
body	Brass	Passivated
coupling nut	Stainless steel	Passivated
insulator	PEEK 450G	-

SMA(M)-SMA(F) Attenuator



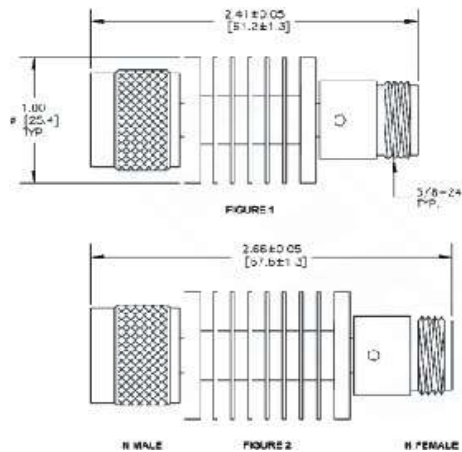
Electrical Data		
Impedance	50	Ω
Operating frequency	18	GHz
VSWR	1.35:1 Max	
Insulation resistance	5000	M Ω
Dielectric withstand voltage AC r.m.s	1000	V
Material Data		
Piece Parts	Material	Surface Plating
center contact	Beryllium copper	Au
outer contact	Stainless steel	Passivated
coupling nut	Stainless steel	Passivated
insulator	PTFE	-

4310(M)-4310(F) Attenuator



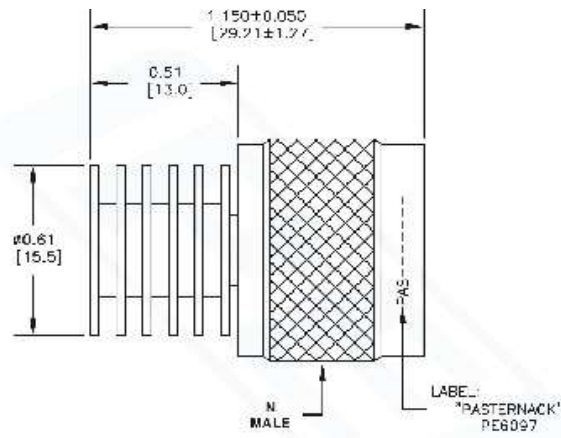
Electrical Data		
Impedance	50	Ω
Operating frequency	6	GHz
VSWR	1.30:1 Max	
Insulation resistance	5000	M Ω
Dielectric withstand voltage AC r.m.s	1000	V
Material Data		
Piece Parts	Material	Surface Plating
center contact	Phosphor bronze CuSnZn	-
outer contact	Beryllium copper/ Brass	Au
body	Copper CuSnZn	-
insulator	PTFE	-

N(M)-N(F) Attenuator



Electrical Data		
Impedance	50	Ω
Operating frequency	18	GHz
VSWR	1.40:1 Max	
Insulation resistance	5000	MΩ
Dielectric withstand voltage AC r.m.s	1000	V
Material Data		
Piece Parts	Material	Surface Plating
center contact	Beryllium copper	Au
outer contact	Stainless steel	Passivated
body	-	-
insulator	PTFE	-

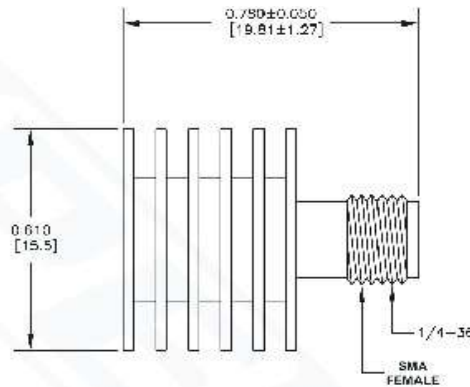
N(M) Load



Electrical Data		
Impedance	50	Ω
Operating frequency	18	GHz
VSWR	1.25:1 Max	
Insulation resistance	5000	M Ω
Dielectric withstand voltage AC r.m.s	1000	V

Mechanical Data		
Piece Parts	Material	Surface Plating
center contact	Beryllium copper	Au
outer contact	Stainless steel	Passivated
coupling nut	Stainless steel	Passivated
insulator	PTFE	-

SMA(F) Load



Electrical Data

Impedance	50	Ω
Operating frequency	18	GHz
VSWR	1.25:1	Max
Insulation resistance	5000	M Ω
Dielectric withstand voltage AC r.m.s	1000	V

Material Data

Piece Parts	Material	Surface Plating
center contact	Beryllium copper	Au/Silver
outer contact	Stainless steel	Passivated
body	-	-
insulator	PTFE	-