



High Performance Microwave Coaxial Cables & Adapters

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Edition 2019



Simple Connectivity Solution

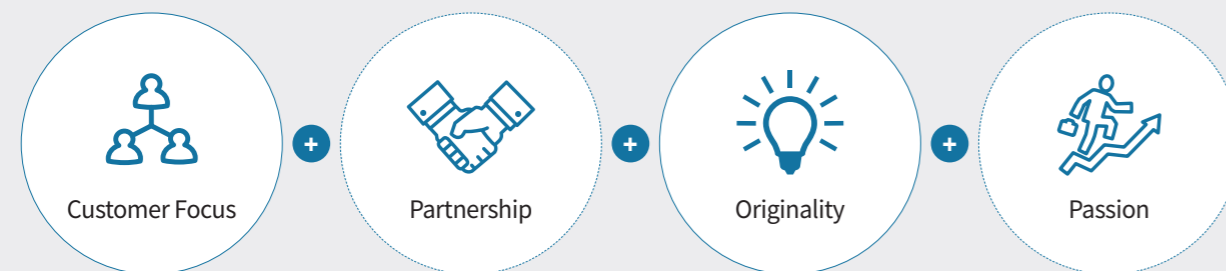
Contents

Company Information

Telcon seeks to develop the best technology by continuous investments in developing wireless communication parts which are essential for ICT business since the founding in 1999. Especially, we offer high-quality services in the fields of wireless communication device, wireless network installation, and communication system.

Moreover, our business area has expanded to automotive and medical equipment with the establishment of local subsidiaries in China and Vietnam, which help us enhance global competitiveness.

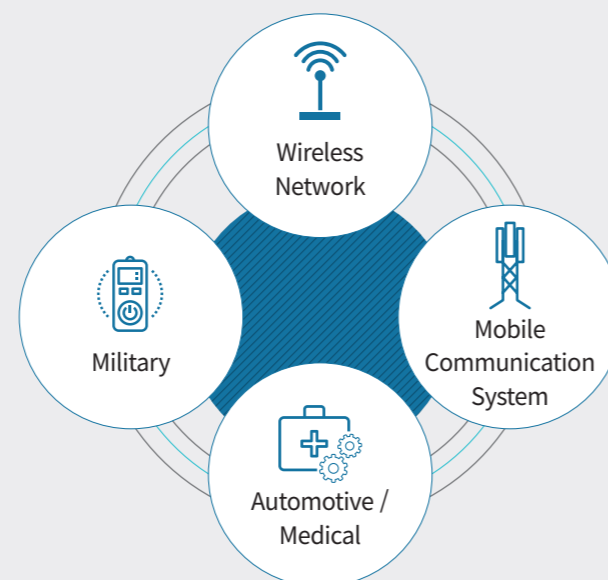
Core Values



Vision



Business Area



TLS & TS Series

06-10

TLS 150
TLS 210
TS 180

TES Series

12-17

TES 140
TES 200
TES 310

Precision Adapters

18

2.4mm

19-20

2.92mm

21-25

3.5mm

26-30



Low Loss Microwave Cable assembly

Telcon's higher frequency, low loss cable assemblies interconnect solution offer a wider range of applications for test & measurements, 5G telecommunication, aerospace and military featuring extreme performance in electrical stability and lower loss.

Right from the dielectric core design to complete coaxial cable assemblies, Telcon is fully qualified for your needs.

Our cable assembly system ensures a reliable interconnection in your requirement that is coming from professional assembly technique and strict quality management according to your specific needs.

Telcon's microwave cable assemblies offer up to 40GHz with velocity of propagation up to 83% by Telcon's unique microwave cable construction design.

Telcon's microwave cable assemblies are produced per MIL-C-17, MIL-T-81490 and ASTM-B-298 to meet your test requirement.



Jacket customization for your special requirements is available upon your request. Especially for the test and measurement application in lab or production environment, our cable shows maximized flexibility in parallel with maintaining outstanding stable electrical performance in various of requirement.

Ruggedized cable assembly solution is available for applications involving a wide spectrum of requirements, enhanced flexibility, increased mechanical strength or protection against compression or chemical environment.

Various of adapters are for our needs:

N, SMA, 2.92mm & more



TLS & TS



TLS and TS microwave series cable are constructed using a low density PTFE dielectric with unique shielding offering velocity of propagation up to 76% that gear toward excellent low loss characteristics and enhanced electrical stability compared to standard flexible cable in DC through 40GHz.

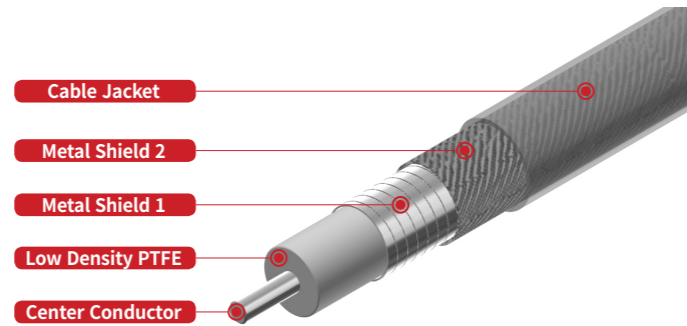
TS is an economical solution and performs outstanding stability in phase, amplitude, group delay in DC through 8.5GHz.

TLS & TS Series

TS 180

Available Connectors:

- TLS150**
 - 2.92mm(Plug & Jack)
 - SMA(Plug & Jack)
- TLS210**
 - 3.5mm(Plug)
 - SMA(Plug)
 - N(Plug)
- TS180**
 - SMA(Plug)
 - N(Plug)



Key Features of TLS & TS series microwave cable assemblies:

- Maximized phase and amplitude stability through operating frequency.
- Minimized both reflective and insertion losses.
- Stranded silver plated conductor and shield materials per ASTM-B-298 allows outstanding flexibility while performing excellent lower attenuation and accomplishing amplitude stability.
- Low Density PTFE core per MIL-C-17, with dielectric constant 1.7 contributes higher velocity of propagation and electrical stability.
- Unique cable jacketing is available for maximized flexibility and protection while electrical stability is still maintained.

PHYSICAL & ENVIRONMENTAL(Mechanical units are in mm)

SPECIFICATIONS	TLS150	TLS210	TS180
Operating Frequency	DC ~ 40GHz	DC ~ 26.5GHz	DC ~ 8.5GHz
Center Conductor	Ø1.00	Ø1.50	Ø1.25
Dielectric Core	Ø2.85	Ø4.05	Ø3.6
Shielding	Ø3.51	Ø4.76	Ø4.05
Outer Diameter	Ø5.5	Ø6.5	Ø5.80
Minimum Bending Radius	20	30	30
Impedance (ohm)	50(Nominal)	50(Nominal)	50(Nominal)
Velocity of Propagation	76%	76%	76%
Time Delay	4.25 ns/m	4.25 ns/m	4.25 ns/m
RF Leakage	-90 dB	-90 dB	-90 dB
Operating Temp. (°C)	-50°C ~ 120°C	-50°C ~ 120°C	-50°C ~ 120°C
Jacketing	TPU *	TPU	TPU
Phase Stability vs. Flexure (Through Operating Frequency)	8°	4°	2°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below	-0.1 below	-0.1 below

* PTFE double jacket is available for enhanced protection.

High performance Microwave Coaxial Cables



Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TS 180	N Plug	N(P)	8.5GHz	1.25:1 through 8.5GHz
	SMA Plug	SMA(P)	8.5GHz	1.25:1 through 8.5GHz

SPECIFICATIONS	TS180
Operating Frequency	DC ~ 8.5GHz
Center Conductor	Ø1.25
Dielectric Core	Ø3.6
Shielding	Ø4.05
Outer Diameter	Ø5.80
Minimum Bending Radius	30
Impedance (ohm)	50 (Nominal)
Velocity of Propagation	76%
Time Delay	4.25 ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 120°C
Jacketing	TPU
Phase Stability vs. Flexure (Through Operating Frequency)	2°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

TLS 150

High performance Microwave Coaxial Cables



TLS 210

High performance Microwave Coaxial Cables



Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TLS 150	2.92mm Plug	2.92mm Plug	40 GHz	1.20:1 through 18GHz
	2.92mm Jack	2.92mm Jack		1.25:1 through 40GHz
	SMA Plug	SMA Plug	18 GHz	1.25:1 through 18GHz
	SMA Jack	SMA Jack		

Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TLS 210	3.5mm Plug	3.5mm Plug	26.5 GHz	1.25:1 through 18GHz 1.25:1 through 26.5GHz
	SMA Plug	SMA Plug	18 GHz	1.25:1 through 18GHz
	N Plug	N Plug		

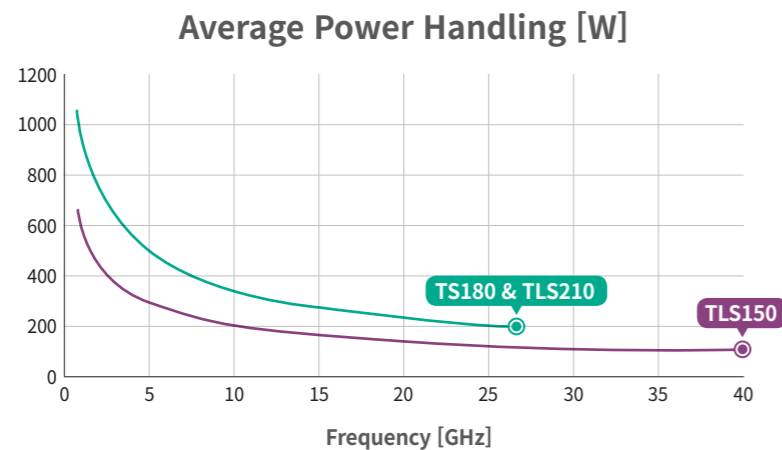
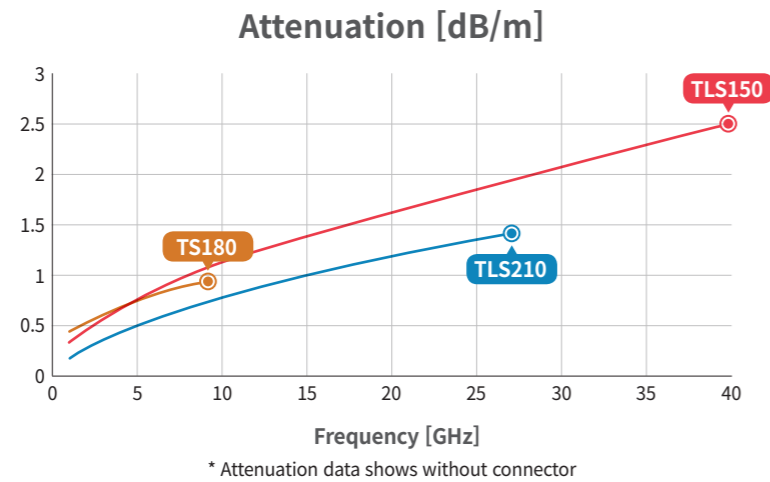
SPECIFICATIONS	TLS150
Operating Frequency	DC ~ 40GHz
Center Conductor	Ø1.00
Dielectric Core	Ø2.85
Shielding	Ø3.51
Outer Diameter	Ø5.5
Minimum Bending Radius	20
Impedance (ohm)	50 (Nominal)
Velocity of Propagation	76%
Time Delay	4.25 ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 120°C
Jacketing	TPU *
Phase Stability vs. Flexure (Through Operating Frequency)	8°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

SPECIFICATIONS	TLS210
Operating Frequency	DC ~ 26.5GHz
Center Conductor	Ø1.50
Dielectric Core	Ø4.05
Shielding	Ø4.76
Outer Diameter	Ø6.5
Minimum Bending Radius	30
Impedance (ohm)	50 (Nominal)
Velocity of Propagation	76%
Time Delay	4.25 ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 120°C
Jacketing	TPU
Phase Stability vs. Flexure (Through Operating Frequency)	4°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

* PTFE double jacket is available for enhanced protection.

TS & TLS

Telcon produces, high performance connectors with excellent reliability even after multiple cycles of hard use. Optimized connector design and materials conform to MIL-C-39012 to achieve lowest VSWR and attenuation through all bandwidth of frequency guaranteeing the microwave cable assemblies will maintain outstanding stable performance with reliability.



Available Connectors and Electrical Performance

Description	Part Number	Cable Group	Max. Frequency	Max. VSWR(Per Connector)
2.92mm Plug	2.92(P)	TLS150	40 GHz	1.20:1 through 18GHz
2.92mm Jack	2.92(J)			1.25:1 through 40GHz
3.5mm Plug	3.5(P)	TLS210	26.5 GHz	1:25:1 through 18GHz 1.25:1 through 26.5GHz
SMA Plug	SMA(P)	TLS150, TLS210	18 GHz	1.25:1 through 18GHz
SMA Jack	SMA(J)	TLS150		
N Plug	N(P)	TLS210	18GHz	1.25:1 through 18GHz
SMA Plug N Plug	SMA(P) N(P)	TS180	8.5GHz	1.25:1 through 8.5GH



TES



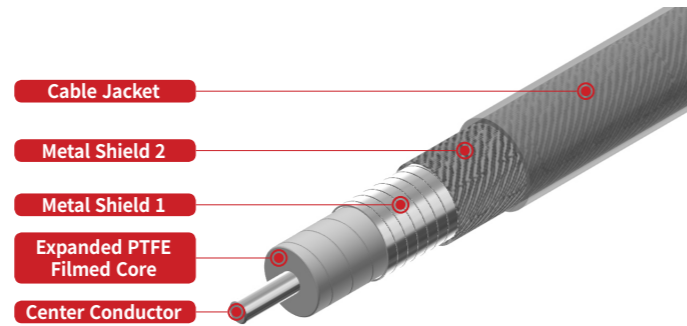
TES microwave series cable are constructed using multi layers of expanded PTFE dielectric film meeting MIL-C-17 Type-6 standard with SPC (Silver Plated Copper) center conductor meeting ASTM-B-209 and its shielding effectiveness offering velocity of propagation up to 83% that gear toward even lower loss characteristics, higher electrical stability compared to standard low loss flexible cable in DC through 40GHz. Majority of TES series microwave cable application is precision test, military and aerospace industry where stability in phase, amplitude, group delay are the key requirement.

TES Series

TES 140

Available Connectors:

- TES140 — 2.92mm(Plug & Jack)
3.5mm(Plug & Jack)
- TES200 — 3.5mm(Plug & Jack)
N (Plug)
- TES310 — SMA(Plug)
N(Plug)



Key Features of TES series microwave cable assemblies:

- Increased phase and amplitude stability across operating frequency is guaranteed versus flexure cycles and wide spectrum of operating temperature.
- Even lower reflective and insertion losses.
- Solid Silver Platted Conductor and its shield materials per ASTM-B-298 and IPC-FC-221 allows outstanding flexibility while performing excellent lower attenuation and accomplishing amplitude and phase stability.
- Expanded PTFE core per MIL-C-17 Type-6, with dielectric constant 1.43 contributes even higher velocity of propagation and electrical stability where aerospace requirement is a must.
- FEP (Fluorinated Ethylene Propylene) is an excellent jacket because of its high temperature resistance and chemical durability per MIL-T-81490.

PHYSICAL & ENVIRONMENTAL (Mechanical units are in mm)

SPECIFICATIONS	TES140	TES200	TES310
Operating Frequency	DC ~ 40GHz	DC ~ 26.5GHz	DC ~ 18GHz
Center Conductor	Ø0.93	Ø1.40	Ø2.3
Dielectric Core	Ø2.5	Ø3.6	Ø6.3
Shielding	Ø3.1	Ø4.2	Ø7.25
Outer Diameter	Ø3.6	Ø5.1	Ø7.9
Minimum Bending Radius	20	30	30
Impedance (ohm)	50 (Norminal)	50 (Norminal)	50 (Norminal)
Velocity of Propagation	83%	83%	83%
Time Delay	4.0 ns/m	4.0 ns/m	4.0 ns/m
RF Leakage	-90 dB	-90 dB	-90 dB
Operating Temp. (°C)	-50°C ~ 150°C	-50°C ~ 150°C	-50°C ~ 150°C
Jacketing	FEP *	FEP	FEP
Phase Stability vs. Flexure (Through Operating Frequency)	4°	3°	5°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below	-0.1 below	-0.1 below

* Ruggedized Cable option is available for extra protection against flexure and harsh environment.

High performance Microwave Coaxial Cables



Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TES 140	2.92mm Plug	2.92mm Plug	40GHz	1.20:1 through 18GHz 1.25:1 through 40GHz
	2.92mm Jack	2.92mm Jack		
	3.5mm Plug	3.5mm Plug		
	3.5mm Jack	3.5mm Jack		

SPECIFICATIONS	TES140
Operating Frequency	DC ~ 40GHz
Center Conductor	Ø0.93
Dielectric Core	Ø2.85
Shielding	Ø3.1
Outer Diameter	Ø3.6
Minimum Bending Radius	20
Impedance (ohm)	50 (Norminal)
Velocity of Propagation	83%
Time Delay	4.0ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 150°C
Jacketing	FEP *
Phase Stability vs. Flexure (Through Operating Frequency)	4°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

* Ruggedized Cable option is available for extra protection against flexure and harsh environment.

TES 200

High performance Microwave Coaxial Cables



Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TES 200	3.5mm Plug	3.5mm Plug	26.5GHz	1.25:1 through 18GHz 1.25:1 through 26.5GHz
	3.5mm Jack	3.5mm Jack		
	N Plug	N Plug		
	N Jack	N Jack		

SPECIFICATIONS	TES200
Operating Frequency	DC ~ 26.5GHz
Center Conductor	Ø1.40
Dielectric Core	Ø3.6
Shielding	Ø4.2
Outer Diameter	Ø5.1
Minimum Bending Radius	30
Impedance (ohm)	50 (Norminal)
Velocity of Propagation	83%
Time Delay	4.0ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 150°C
Jacketing	FEP
Phase Stability vs. Flexure (Through Operating Frequency)	3°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

TES 310

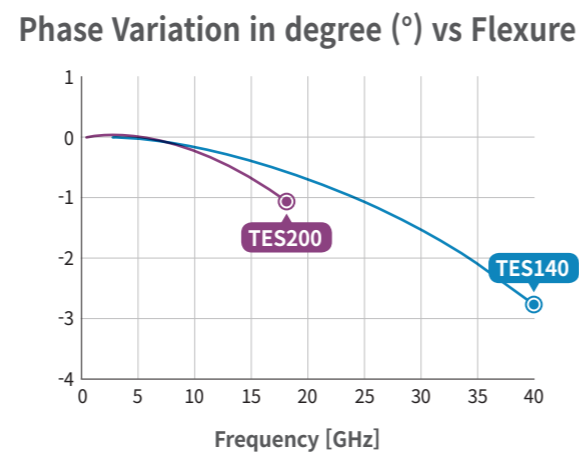
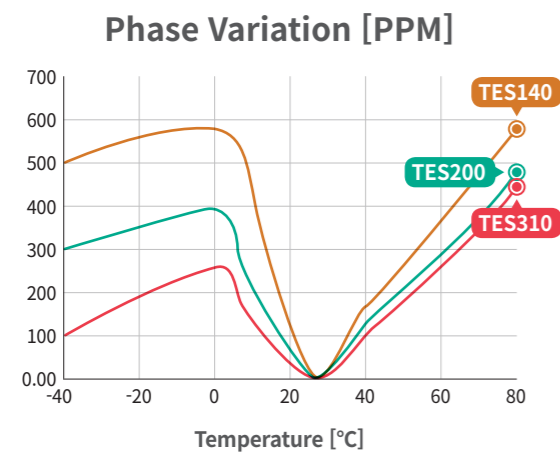
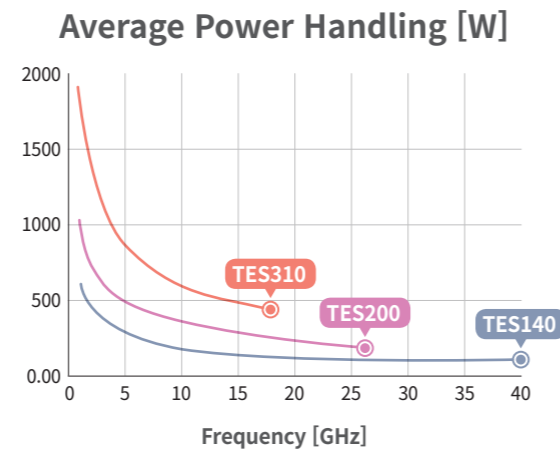
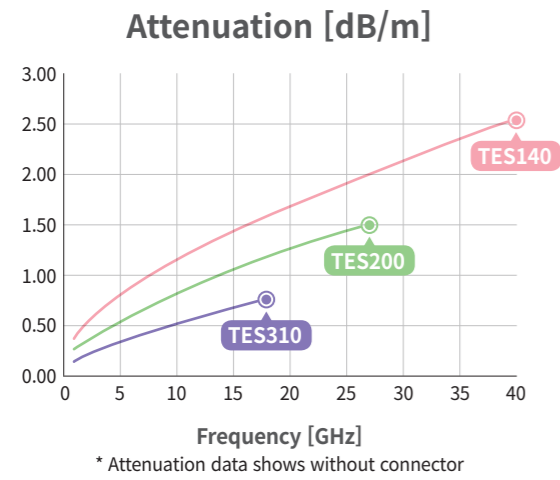
High performance Microwave Coaxial Cables



Cable Group	Description		Max. Frequency	Max. VSWR(Per Connector)
TES 310	N Plug	N Plug	18GHz	1.25:1:1 through 18GHz
	SMA PLUG	SMA PLUG		

SPECIFICATIONS	TES310
Operating Frequency	DC ~ 18GHz
Center Conductor	Ø2.3
Dielectric Core	Ø6.3
Shielding	Ø7.25
Outer Diameter	Ø7.9
Minimum Bending Radius	30
Impedance (ohm)	50(Norminal)
Velocity of Propagation	83%
Time Delay	4.0ns/m
RF Leakage	-90 dB
Operating Temp. (°C)	-50°C ~ 150°C
Jacketing	FEP
Phase Stability vs. Flexure (Through Operating Frequency)	5°
IL Stability vs. Flexure (dB @ Minimum BR)	-0.1 below

Telcon produces, high performance connector with excellent reliability even after multiple cycles of mating and hard use. Optimized connector design and materials conform to MIL-C-39012 to achieve lowest VSWR and attenuation through all bandwidth of frequency guaranteeing the microwave cable assemblies will maintain outstanding performance with the reliability.



Available Connectors and Electrical Performance

Description	Part Number	Cable Group	Max. Frequency	Max. VSWR (Per Connector)
2.92mm Plug	2.92(P)	TES140	40 GHz	1.20:1 through 18GHz 1.25:1 through 40GHz
2.92mm Jack	2.92(J)			
3.5mm Plug	3.5(P)			
3.5mm Jack	3.5(J)	TES210	26.5 GHz	1:25:1 through 18GHz 1.25:1 through 26.5GHz
3.5mm Plug	3.5(P)			
3.5mm Jack	3.5(J)	TES310	18GHz	1.25:1 through 18GHz
SMA Plug	SMA(P)			
N Plug	N(P)			

※ Vent Hole connector for Thermal/Vacuum application is available for outgassing purpose

Part Number Configuration

2.92(P)

|

2.92mm Plug
Start with one end connector type.

TES140

|

TES140 Cable
Select Cable type.

2.92(J)

|

2.92mm Female
Select the other end of connector type.

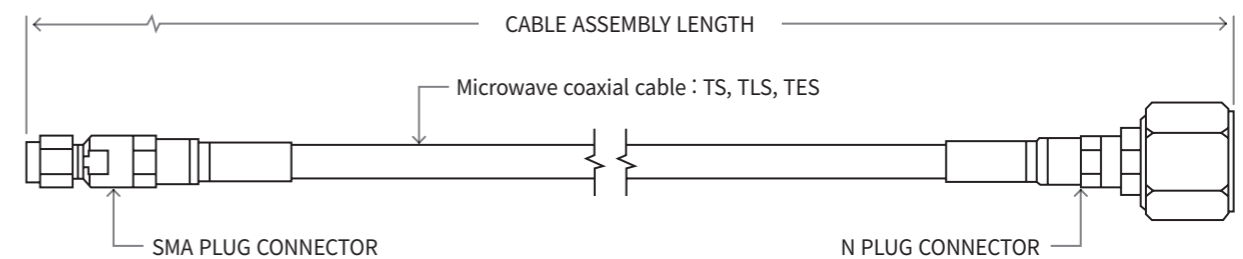
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Length in mm
Length is expressed in metric or inches for any customized length.

Example:

2.92(P) – TES140 – 2.92(J) – 1000mm → TES140 Cable assembly with 2.92mm Connector plug and jack types with 1 meter long.



Precision Adapters



Telcon is a leading manufacturer of high performance commercial wireless and telecommunications solutions, worldwide.

Manufacturer and designer of microwave and RF components, Telcon's custom design capabilities have generated a substantial number of innovative microwave and wireless components for use in many markets and programs for more than 20 years.

As product development is a core value, Telcon will continue to demonstrate its talent for tackling new design tasks. Unusual customer specifications which require Telcon engineering to build custom components enable Telcon to stay ahead in wireless technology by designing, creating, testing and delivering products to be used in 2G, 3G, 4G, 5G systems and beyond.

Our Precision components are generally used where signal integrity and quality are important and a high level of reliability is required. Precision products are generally high frequency and can run to 26, 40 or 50 GHz.

Precision Connectors and Adaptors are generally used in the following applications and industries:

- Defence
- Aerospace
- Test and Measurement
- Space
- Military communication
- Marine,
- Satcomms
- Medical



2.4mm to 2.4mm type

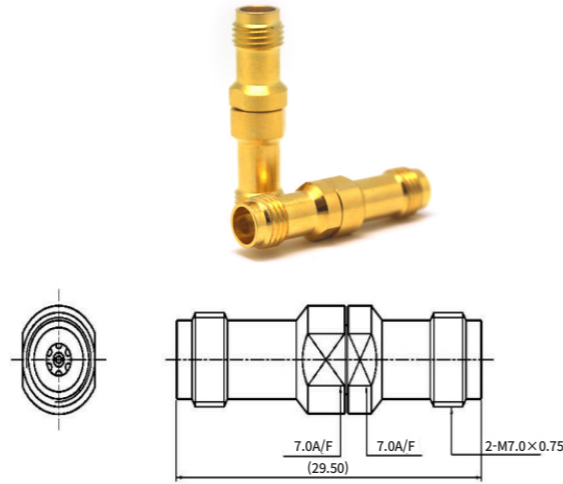
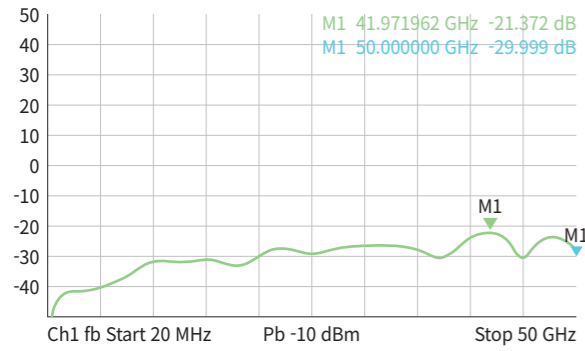


Parameter	Value	Remarks
Frequency Range	DC ~ 50.0GHz	
Impedance	50ohm(Nominal)	
Return Loss	≤ -19.08dB	
Insertion Loss	> -0.05dB x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	500 Vrm	
Contact Resistance(mOhm)	Inner Contact ≤ 3.0mΩ Outer Contact ≤ 2.5mΩ	
Screening Effectiveness	≤ -100dB@1GHz	
Input Power	280W @ 2.6GHz, 25°C CW	
Durability	500matings MIN.	
Coupling nut retention force	≥ 637N	
Center contact captivation	≥ 22 N	
Coupling nut Mating Force	Proof Torque	≥ 16.5Kgf.Cm
	Recommended Mating Torque	8.0~12.0Kgf.Cm
Temperature / Humidity Range	Mating Torque	
Material (Finish)	Body : STS (Au) Coupling nut : STS (Au) Inner : BeCu, Brass(Au) Insulator : Ultem C Ring : Phosphor bronze (TCP)	

2.4mm to 2.4mm type

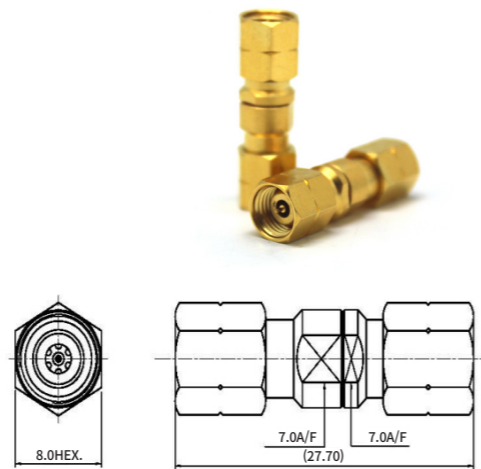
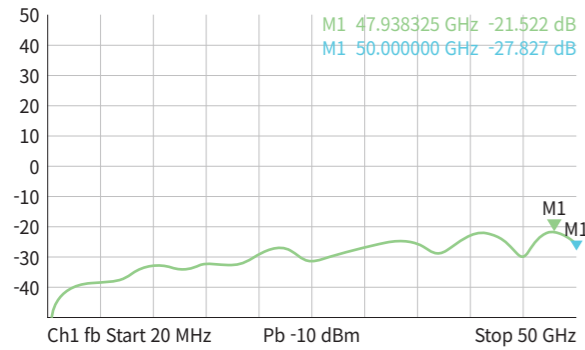
2.4mm Female - 2.4mm Female

Trc1 S11 dB Mag 10dB / Ref 0 dB Cal
Trc2 S11 dB Mag 10dB / Ref 0 dB Cal



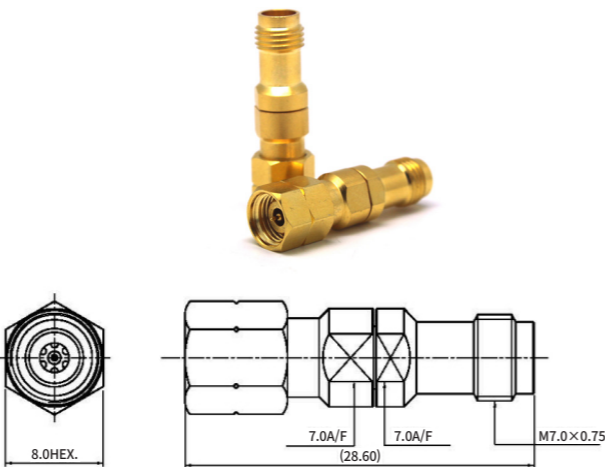
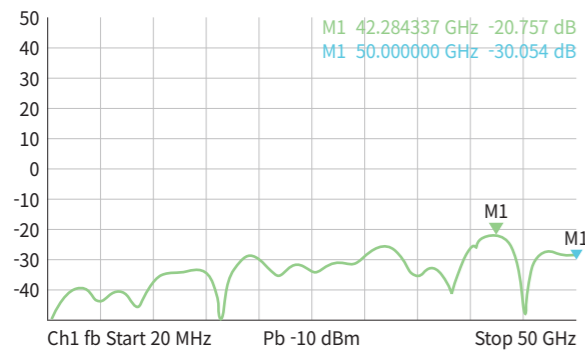
2.4mm Male - 2.4mm Male

Trc1 S11 dB Mag 10dB / Ref 0 dB Cal
Trc2 S11 dB Mag 10dB / Ref 0 dB Cal



2.4mm Female - 2.4mm Male

Trc1 S11 dB Mag 10dB / Ref 0 dB Cal
Trc2 S11 dB Mag 10dB / Ref 0 dB Cal



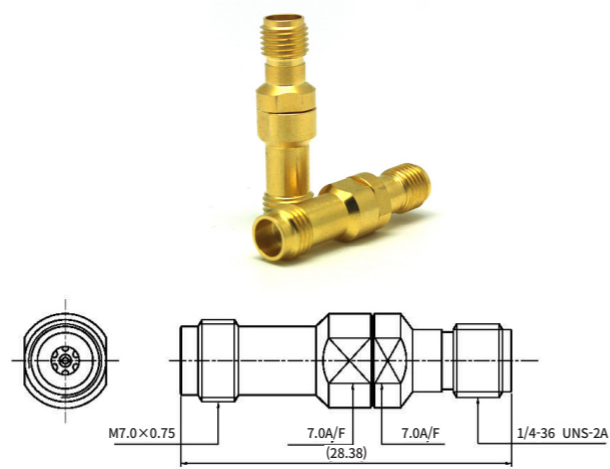
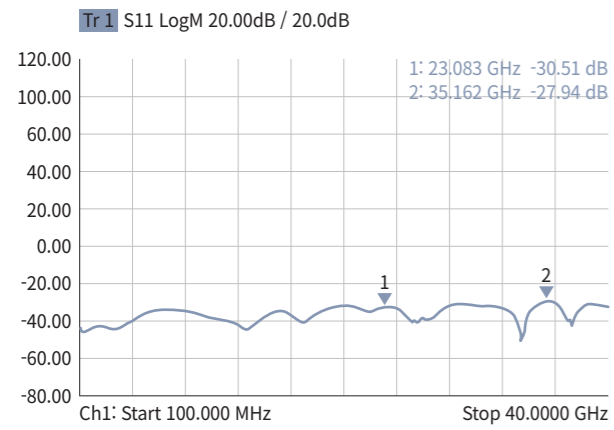
2.92mm to 2.4mm type



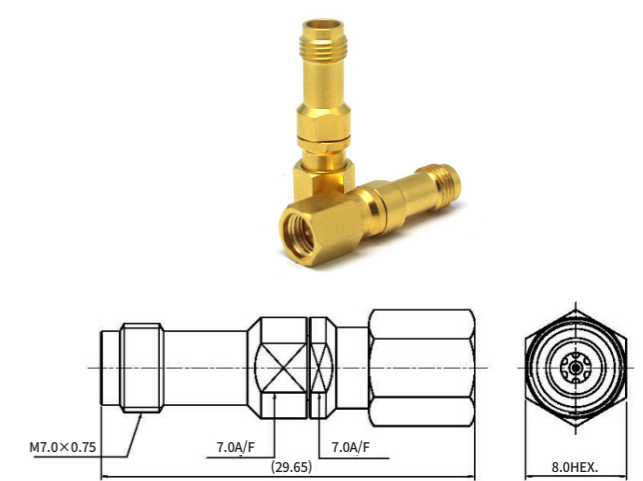
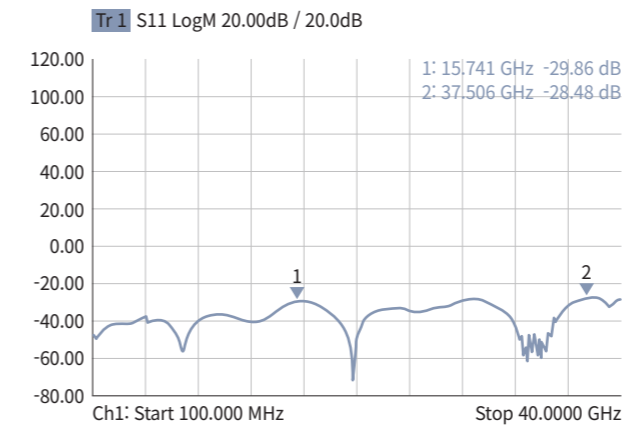
Parameter	Value	Remarks
Frequency Range	DC ~ 40.0GHz	
Impedance	50ohm(Nominal)	
Return Loss	≤ -20.83dB	
Insertion Loss	> -0.05dB x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	500 Vrm	
Contact Resistance(mOhm)	Inner Contact ≤ 3.0mΩ Outer Contact ≤ 2.5mΩ	
Screening Effectiveness	≤ -100dB@1GHz	
Input Power	280W @ 2.6GHz, 25°C CW	
Durability	500matings MIN.	
Coupling nut retention force	≥ 637N	
Center contact captivation	≥ 22 N	
Coupling nut Mating Force	Proof Torque	≥ 16.5Kgf.Cm
	Recommended Mating Torque	8.0~12.0Kgf.Cm
Temperature / Humidity Range	-40oC ~ +125oC / 65oC, 80%	
Material (Finish)	Body : STS (Au) Coupling nut : STS (Au) Inner : BeCu, Brass(Au) Insulator : Ultem C Ring : Phosphor bronze (TCP)	

2.92mm to 2.4mm type

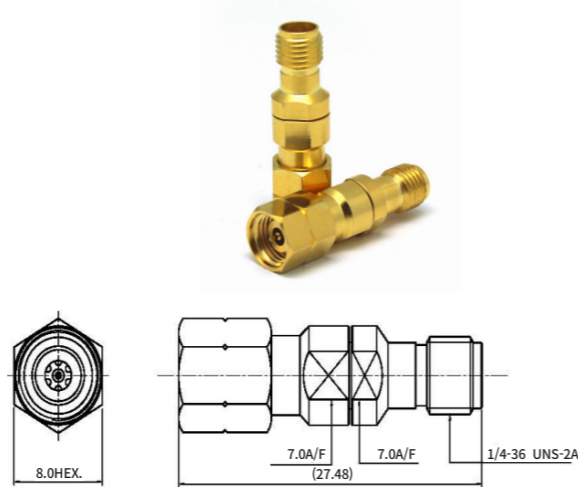
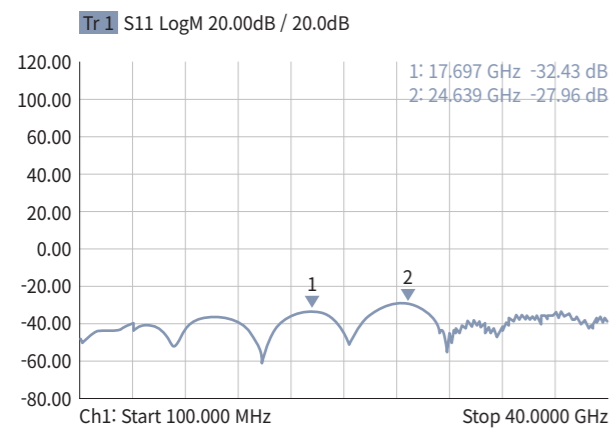
2.92mm Female - 2.4mm Female



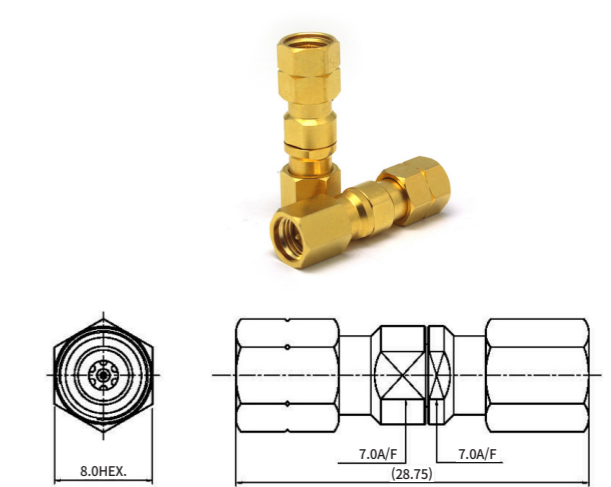
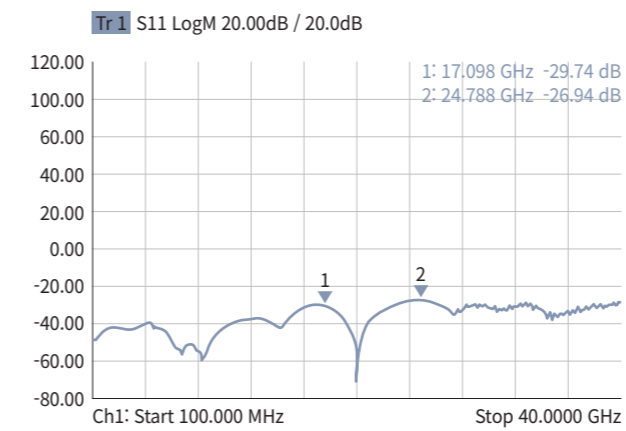
2.92mm Male - 2.4mm Female



2.92mm Female - 2.4mm Male



2.92mm Male - 2.4mm Male

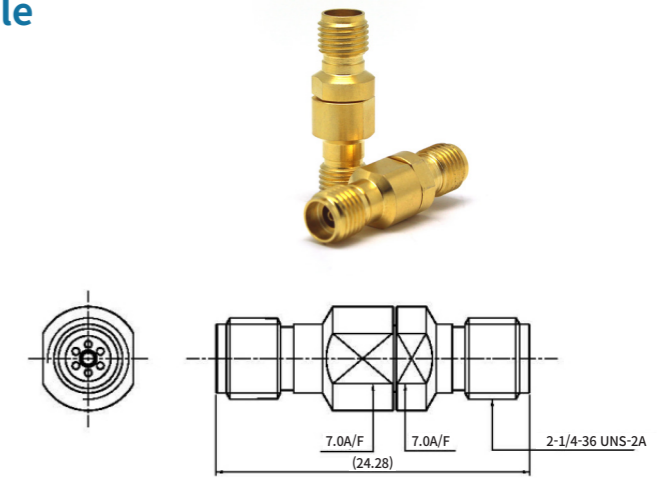
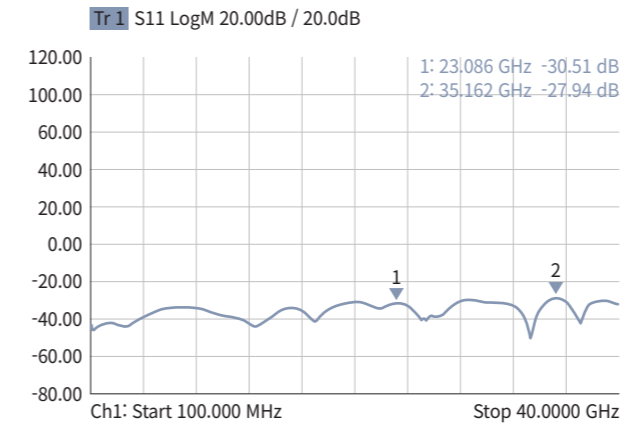


2.92mm to 2.92mm type

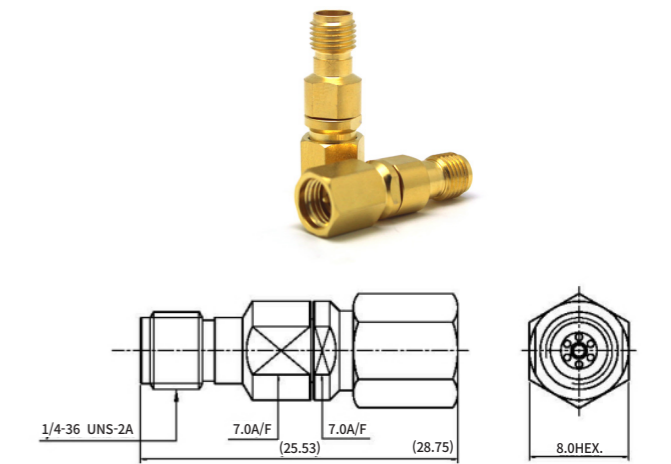
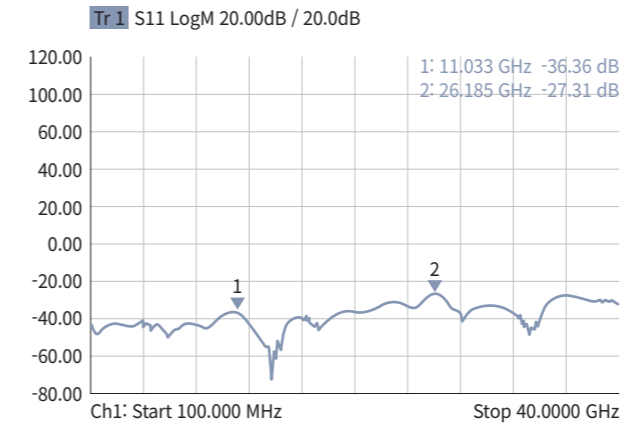


Parameter	Value	Remarks
Frequency Range	DC ~ 40.0GHz	
Impedance	50ohm(Nominal)	
Return Loss	≤ -20.83dB	
Insertion Loss	> -0.05dB x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	1000 Vrm	
Contact Resistance(mOhm)	Inner Contact ≤ 3.0mΩ Outer Contact ≤ 2.5mΩ	
Screening Effectiveness	≤ -100dB@1GHz	
Input Power	280W @ 2.6GHz, 25°C CW	
Durability	500matings MIN.	
Coupling nut retention force	≥ 637N	
Center contact captivation	≥ 22 N	
Coupling nut Mating Force	Proof Torque	≥ 16.5Kgf.Cm
	Recommended Mating Torque	8.0~12.0Kgf.Cm
Temperature / Humidity Range	-40oC ~ +125oC / 65oC, 80%	
Material (Finish)	Body : STS (Au) Coupling nut : STS (Au) Inner : BeCu, Brass(Au) Insulator : Ultem C Ring : Phosphor bronze (TCP)	

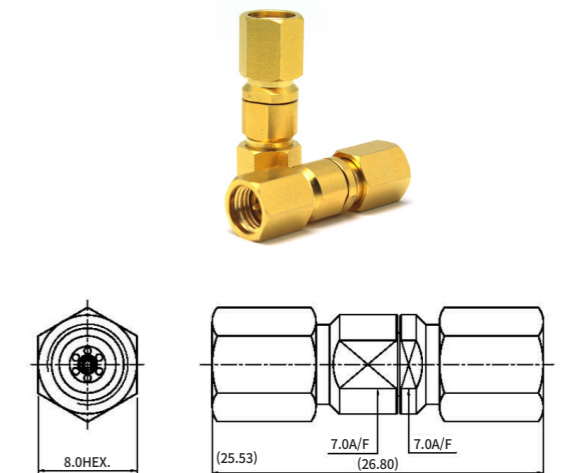
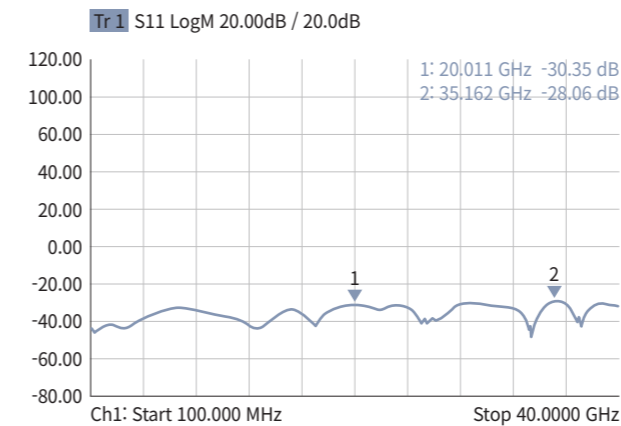
2.92mm Female - 2.92mm Female



2.92mm Female - 2.92mm Male



2.92mm Male - 2.92mm Male

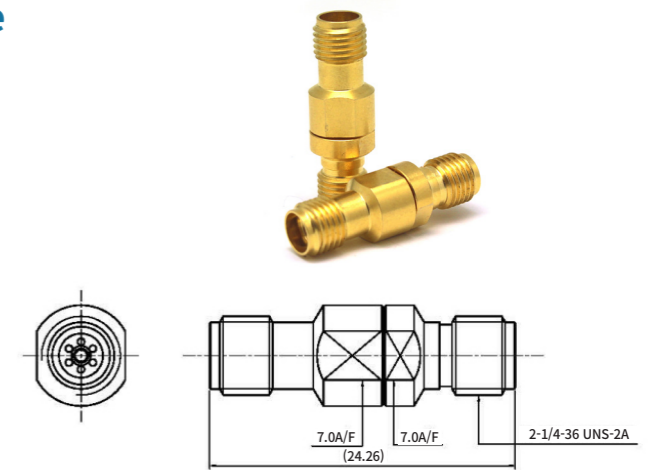
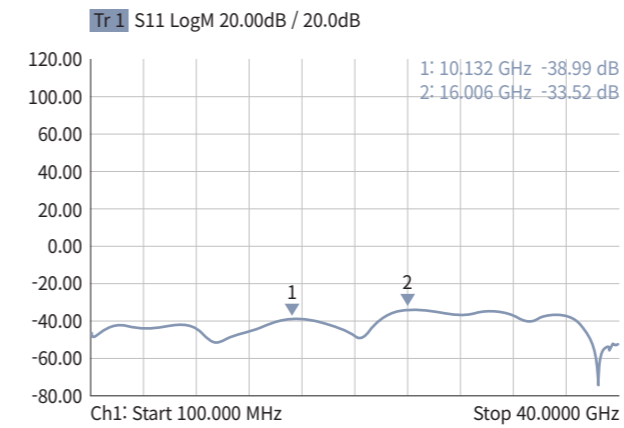


3.5mm to 2.92mm type

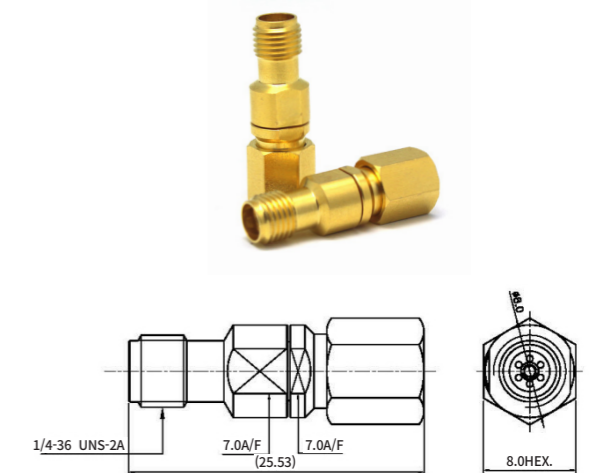
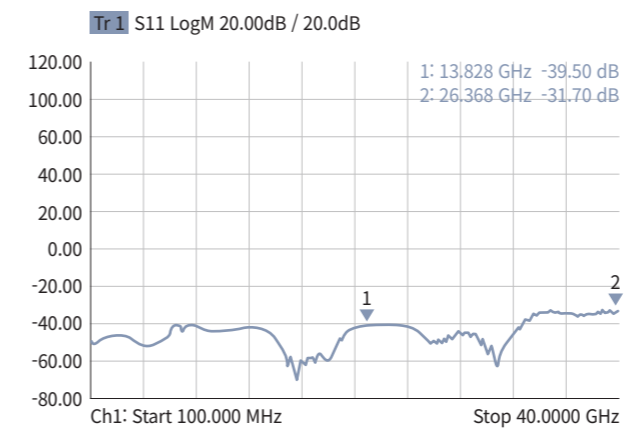


Parameter	Value	Remarks
Frequency Range	DC ~ 26.5GHz	
Impedance	50ohm(Nominal)	
Return Loss	≤ 20.83dB	
Insertion Loss	> -0.05dB x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	1000 V _{rm}	
Contact Resistance(mOhm)	Inner Contact ≤ 3.0mΩ Outer Contact ≤ 2.5mΩ	
Screening Effectiveness	≤ -100dB@1GHz	
Input Power	280W @ 2.6GHz, 25°C CW	
Durability	500matings MIN.	
Coupling nut retention force	≥ 637N	
Center contact captivation	≥ 22 N	
Coupling nut Mating Force	Proof Torque	≥ 16.5Kgf.Cm
	Recommended Mating Torque	8.0~12.0Kgf.Cm
Temperature / Humidity Range	-40oC ~ +125oC / 65oC, 80%	
Material (Finish)	Body : STS (Au) Coupling nut : STS (Au) Inner : BeCu, Brass(Au) Insulator : Ultem C Ring : Phosphor bronze (TCP)	

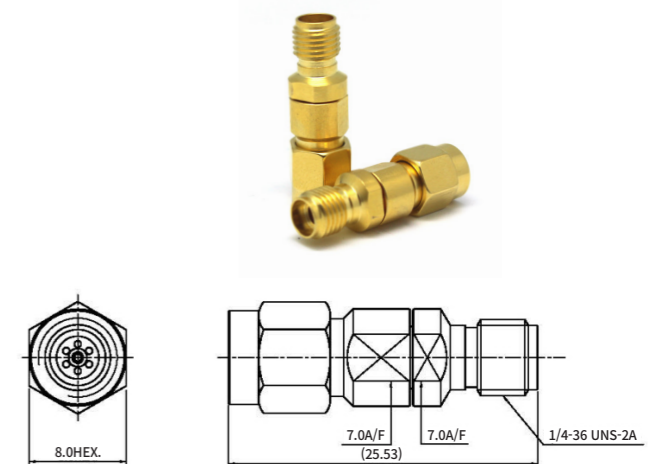
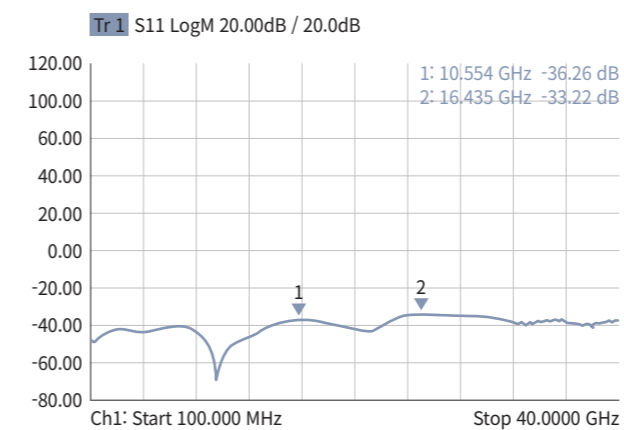
3.5mm Female - 2.92mm Female



3.5mm Female - 2.92mm Male



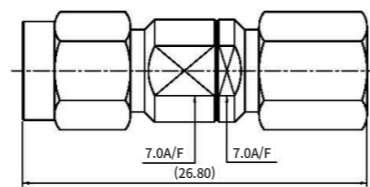
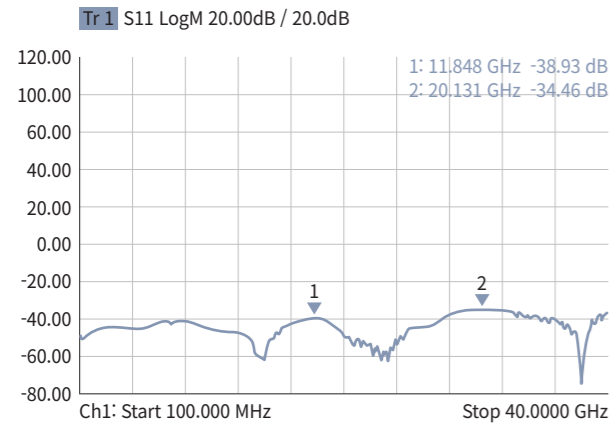
3.5mm Male - 2.92mm Female



3.5mm to 2.92mm type

3.5mm to 3.5mm type

3.5mm Male - 2.92mm Male

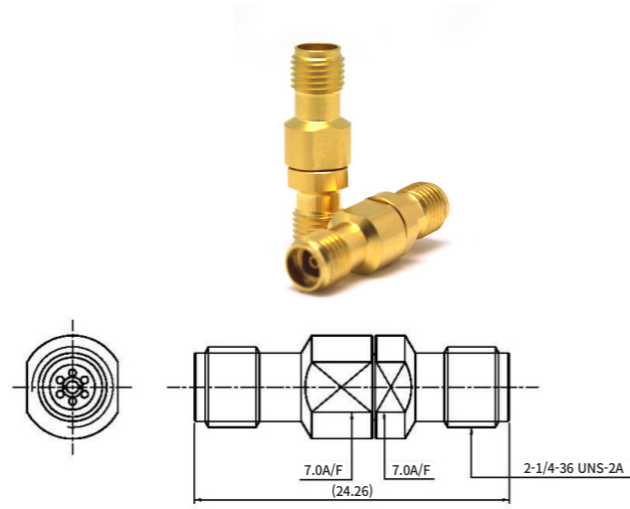
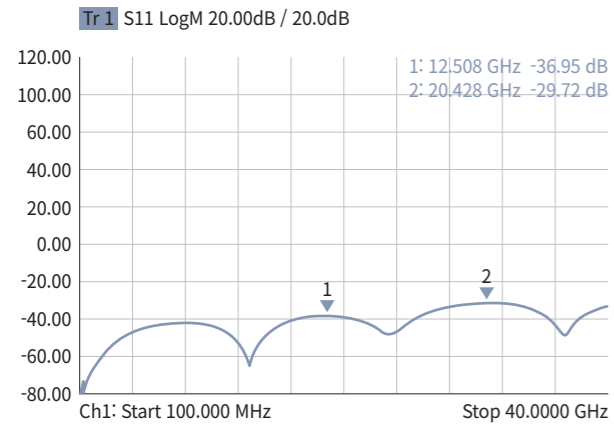


Parameter	Value	Remarks
Frequency Range	DC ~ 26.5GHz	
Impedance	50ohm(Nominal)	
Return Loss	≤ -20.83dB	
Insertion Loss	> -0.05dB x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	1000 Vrm	
Contact Resistance(mOhm)	Inner Contact ≤ 3.0mΩ Outer Contact ≤ 2.5mΩ	
Screening Effectiveness	≤ -100dB@1GHz	
Input Power	280W @ 2.6GHz, 25°C CW	
Durability	500matings MIN.	
Coupling nut retention force	≥ 637N	
Center contact captivation	≥ 22 N	
Coupling nut Mating Force	Proof Torque	≥ 16.5Kgf.Cm
	Recommended Mating Torque	8.0~12.0Kgf.Cm
Temperature / Humidity Range	-40oC ~ +125oC / 65oC, 80%	
Material (Finish)	Body : STS (Au) Coupling nut : STS (Au) Inner : BeCu, Brass(Au) Insulator : Ultem C Ring : Phosphor bronze (TCP)	

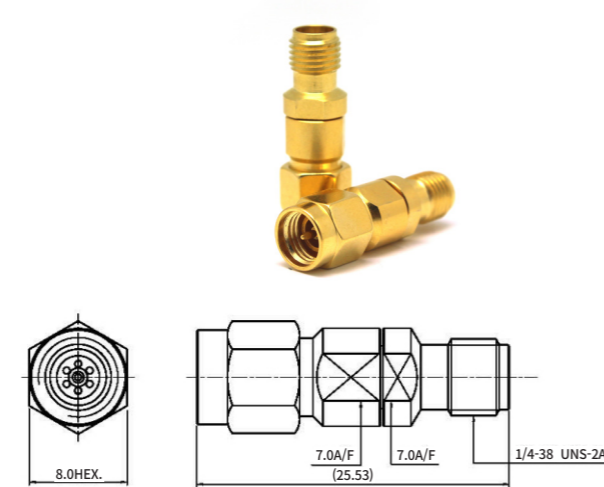
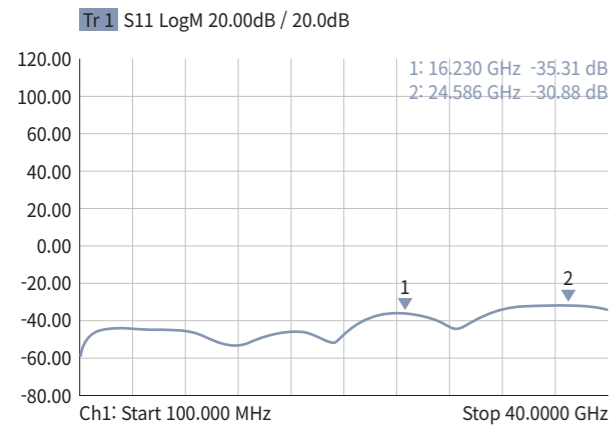
3.5mm to 3.5mm type

PICd type

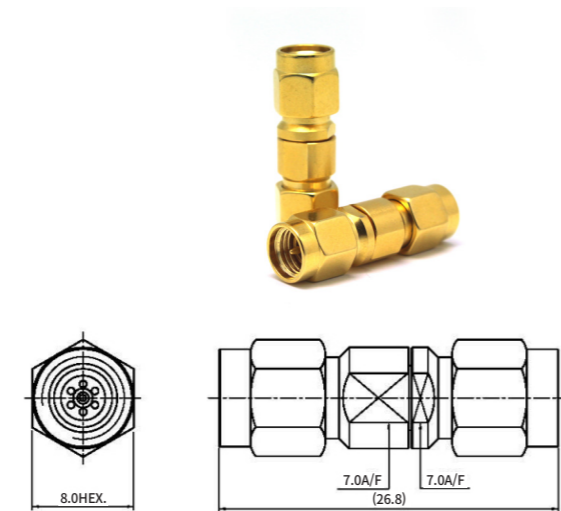
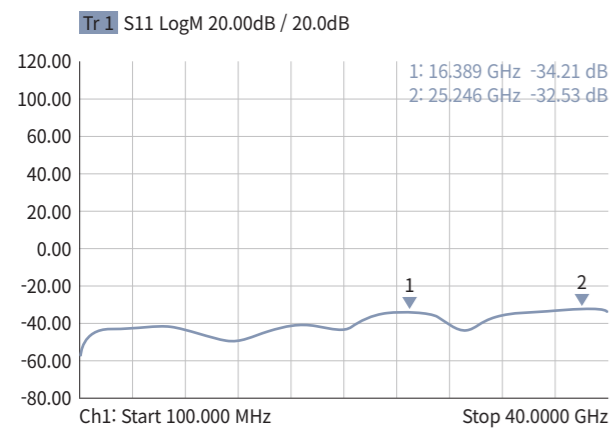
3.5mm Female - 3.5mm Female



3.5mm Female - 3.5mm Male



3.5mm Male - 3.5mm Male



Prominent Intermodulation performance Contact Diverse

- Robust Coupling Retention Force
- Compact size of Locking connector
- Provide High Quality RF Performance
- Stable Corrosion Resistance
- Water proof grade IP67



Parameter	Value	Remarks
Frequency Range	DC ~ 20GHz	
Impedance	50ohm(Nominal)	
Typical VSWR	DC ~ 4GHz	≤ 1.15:1
	4 ~ 6GHz	≤ 1.05:1
	6 ~ 10GHz	≤ 1.06:1
	10 ~ 20GHz	≤ 1.22:1
Insertion Loss	< -0.05 x √f(GHz)	
Insulation resistance	> 5000MΩ	
Dielectric withstanding Voltage	1500 V _{rm}	
Working voltage	500 V _{rms} 60Hz, sea level	
Contact Resistance(mOhm)	Inner Contact	≤ 1.5mΩ
	Outer Contact	≤ 2.0mΩ
Screening Effectiveness	≤ -90dB@2.08GHz	Quick lock
	≤ -80dB@5.875GH	
	≤ -80dB@5.875GH	Screw
Input Power	100W @ 2.6GHz, 85°C CW 280W @ 2.6GHz, 25 °C	
Inter-modulation 3rd order	≤ -166dBc @1.8GHz (2x43dBm)	
Durability	100matings MIN.	
Coupling nut retention force	≥ 450 N	Screw
	≥ 120 N	Quick lock
Center contact captivation	≥ 15 N	
Mating force	Engagement force	≤ 50 N
	Separation force	≤ 35 N
Recommended Mating Torque	4.5~7Kgf. Cm	Screw
Temperature / Humidity Range	-40oC ~ +125oC / 65oC, 80%	
Material (Finish)	Body : Brass (3Mat'l) Coupling nut : Brass (TCP) Inner : BeCu, Brass(Silver) Insulator : PTFE, Ultem Retaining ring : STS(Passivity) C Ring : STS, Phosphor bronze (Passivity, TCP)	



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