

RF Cable & Adaptor

Data sheet (EN02B)



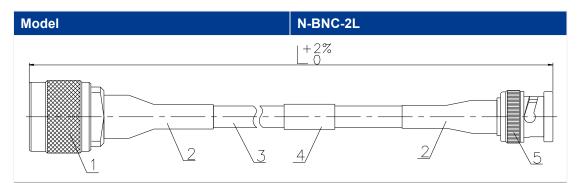


RF Cable & Adaptor DataSheet

RF cables and adaptors are important links in connecting the DUT and instruments. SIGLENT provides high-quality RF cables and adaptors with various materials, connector types and frequency range according to actual test requirements.

Туре	Model	Connector type	Frequency	Length(mm)	Impedance
	N-BNC-2L	N (Male) – BNC (Male)	DC ~ 2 GHz	700	50Ω
	N-N-6L	N (Male) – N (Male)	DC ~ 6 GHz	700	50Ω
	N-SMA-6L	N (Male) – SMA (Male)	DC ~ 6 GHz	700	50Ω
	S06-NMSF-1M	N (Male) – SMA (Female)	DC ~ 6 GHz	1000	50Ω
	N-N-18L	N (Male) – N (Male)	DC ~ 18 GHz	1000	50Ω
	N-SMA-18L	N (Male) – SMA (Male)	DC ~ 18 GHz	1000	50Ω
	S18-NMSF-1M	N (Male) – SMA (Female)	DC ~ 18 GHz	1000	50Ω
	SMA-SMA-18L	SMA (Male) – SMA (Male)	DC ~ 18 GHz	1000	50Ω
	SMA-SMA-26L	SMA (Male) – SMA (Male)	DC ~ 26.5 GHz	1000	50Ω
DE Cablo	SMAF-SMA-26L	SMA (Male) – SMA (Female)	DC ~ 26.5 GHz	1000	50Ω
RF Cable	V26-N35MN35F- 25IN	NMD 3.5 mm (Female) - NMD 3.5 mm (Male)	DC ~ 26.5 GHz	635	50Ω
	V26-N35FA35F- 25IN	NMD 3.5 mm (Female) – APC 3.5 mm (Female)	DC ~ 26.5 GHz	635	50Ω
	S40-29M29F-1M	2.92 mm (Male) – 2.92 mm (Female)	DC ~ 40 GHz	1000	50Ω
	V50-N24MN24F- 25IN	NMD 2.4 mm (Female) – NMD 2.4 mm (Male)	DC ~ 50 GHz	635	50Ω
	V50-N24FA24F- 25IN	NMD 2.4 mm (Female) – APC 2.4 mm (Female)	DC ~ 50 GHz	635	50Ω
Adaptor 1.85F-2.92F-	2.92F-2.92F-40A	2.92mm (Female) – 2.92mm (Female)	DC ~ 40 GHz		50Ω
	1.85F-2.92F-40A	1.85 mm (Female) – 2.92mm (Female)	DC ~ 40 GHz		50Ω
	1.85F-1.85F-67A	1.85 mm (Female) – 1.85mm (Female)	DC ~ 67 GHz		50Ω
		N(M)-SMA(M) Cable	DC ~ 6 GHz	700	50Ω
		N(M)-N(M) Cable	DC ~ 6 GHz	700	50Ω
Utility Kit	UkitSSA3X	N(M)-BNC(F) Adaptor x2	DC ~ 2 GHz		50Ω
		N(M)-SMA(F) Adaptor x2	DC ~ 6 GHz		50Ω
		N-N 10 dB 1W Attenuator	DC ~ 6 GHz		50Ω





Parts

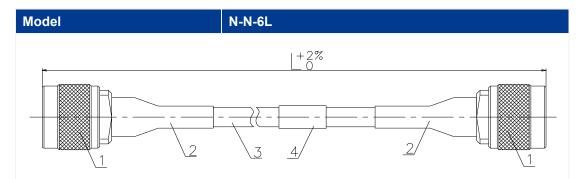
- L Cable length (L=0.7M)
- 1 N Male connector (nickel plated copper)
- 2 High temperature Shrinking tube
- 3 RG223 cable (outer diameter 5.3 mm)
- 4 Tag
- 5 BNC Male connector (nickel plated copper)

Specifications		
Frequency	DC ~ 2 GHz	
Impedance	50 Ω	
VSWR	≤1.20@DC~2GHz	
Insertion loss	≤1.0dB@2GHz	
Velocity of propagation	66%	
Dielectric withstand voltage	≥1000V	
Insulation resistance	≥5000MΩ	
Minimum bending radius	25mm	
Temperature range(Operation)	-55℃~+85℃	
Length	700 mm	

Package and storage

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.





Parts

- L Cable length (L=0.7M)
- 1 N Male connector (nickel plated copper)
- 2 High temperature Shrinking tube
- 3 RG223 cable (outer diameter 5.3 mm)
- 4 Tag

Specifications	
Frequency	DC ~ 6 GHz
Impedance	50 Ω
VSWR	≤1.25:1@6GHz
Insertion loss	≤1.8dB@6GHz
Velocity of propagation	66%
Dielectric withstand voltage	≥1000V
Insulation resistance	≥5000MΩ
Minimum bending radius	25mm
Temperature range(Operation)	-55°C∼+85°C
Length	700 mm

Package and storage

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.



Model N-SMA-6L L +2% 1 2 3 4 2

Parts

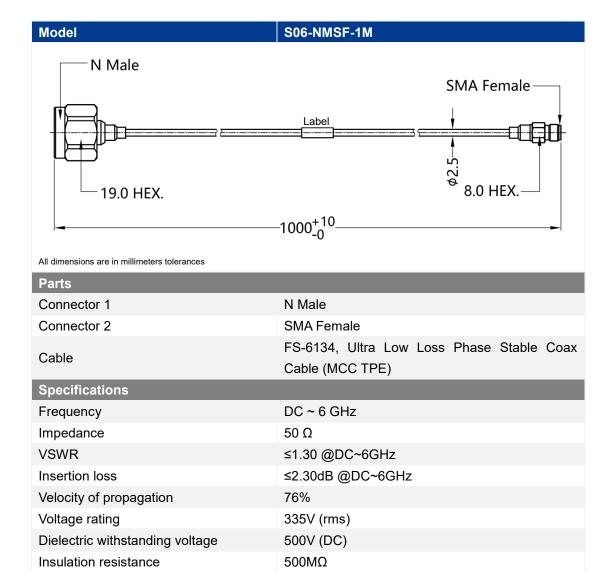
- L Cable length (L=0.7M)
- SMA Male connector (nickel plated gold)
- 2 High temperature Shrinking tube
- 3 RG223 cable (outer diameter 5.3 mm)
- 4 Tag
- 5 N Male connector (nickel plated copper)

Specifications		
Frequency	DC ~ 6 GHz	
Impedance	50 Ω	
VSWR	≤1.25:1@6GHz	
Insertion loss	≤1.8dB@6GHz	
Velocity of propagation	66%	
Dielectric withstand voltage	≥1000V	
Insulation resistance	≥5000MΩ	
Minimum bending radius	25mm	
Temperature range(Operation)	-55℃~+85℃	
Length	700 mm	

Package and storage

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.





RoHS & REACH

Durability

Minimum bending radius static

Recommended coupling torque Coupling nut retention force

Temperature range(Operation)

Minimum bending radius dynamic

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.

13 mm

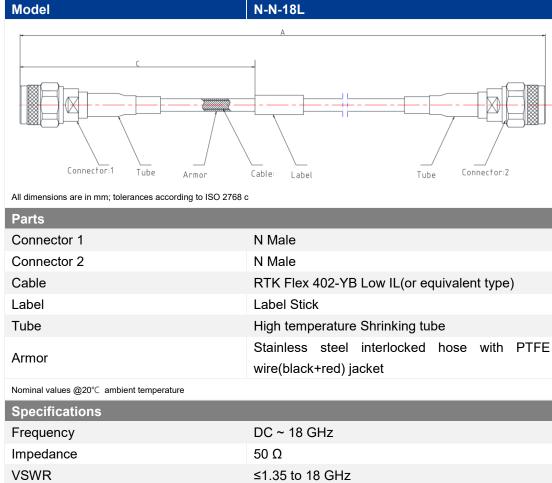
25 mm 7-10 in-lbs

≥60 lbs

≥500 cycles -40℃~+85℃

compliant

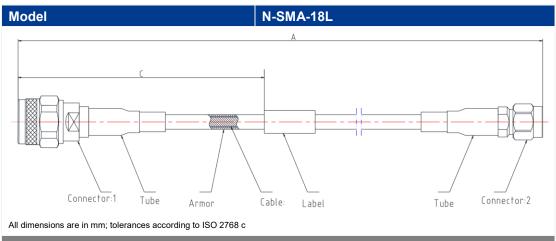




Specifications	
Frequency	DC ~ 18 GHz
Impedance	50 Ω
VSWR	≤1.35 to 18 GHz
Insertion loss	≤2.3dB@DC~18GHz
Velocity of propagation	76%
Phase stability vs. Flexure	≤±10°@18 GHz (Wrapped around a 50mm diameter mandrel)
Amplitude stability vs. Flexure	≤±0.1 dB@18 GHz (Wrapped around a 50mm diameter mandrel)
Minimum bending radius	50.8 mm
Cable Diameter(with armor)	6.6 mm
Temperature range(Operation)	-40℃~+125℃
RoHS	compliant
Length A	1000±10 mm
Length C	100±10 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.



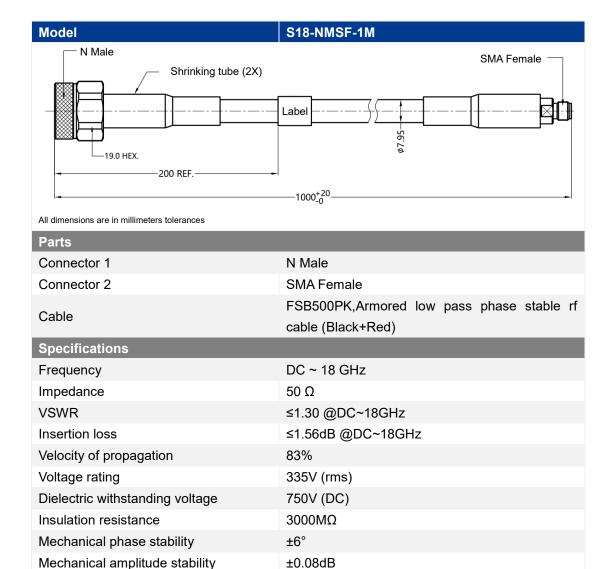


Parts	
Connector 1	N Male
Connector 2	SMA male
Cable	RTK Flex 402-YB Low IL(or equivalent type)
Label	Label Stick
Tube	High temperature Shrinking tube
Armor	Stainless steel interlocked hose with PTFE wire(black+red) jacket
Nominal values @20°C ambient temperature	

Specifications	
Frequency	DC ~ 18 GHz
Impedance	50 Ω
VSWR	≤1.35 to 18 GHz
Insertion loss	≤2.3dB@DC~18GHz
Velocity of propagation	76%
Phase stability vs. Flexure	≤±10°@18 GHz (Wrapped around a 50mm diameter mandrel)
Amplitude stability vs. Flexure	≤±0.1 dB@18 GHz (Wrapped around a 50mm diameter mandrel)
Minimum bending radius	50.8 mm
Cable Diameter(with armor)	6.6 mm
Temperature range(Operation)	-40℃~+125℃
RoHS	compliant
Length A	1000±10 mm
Length C	100±10 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.





RoHS & REACH

Durability

Minimum bending radius static

Minimum bending radius dynamic

Recommended coupling torque

Temperature range(Operation)

Coupling nut retention force

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.

40 mm

80 mm

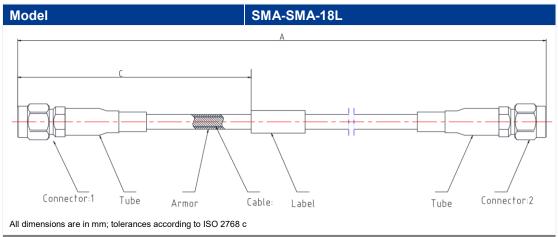
≥60 lbs ≥500 cycles

7-9 in-lbs

-40°C∼+85°C

compliant



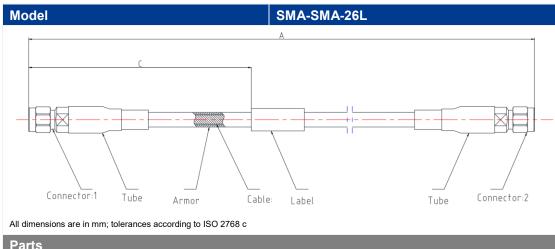


Parts	
Connector 1	SMA Male
Connector 2	SMA Male
Cable	RTK Flex 402-YB Low IL(or equivalent type)
Label	Label Stick
Tube	High temperature Shrinking tube
Armor	Stainless steel interlocked hose with PTFE wire(black+red) jacket
Nominal values @20°C ambient temperature	

Specifications	
Frequency	DC ~ 18 GHz
Impedance	50 Ω
VSWR	≤1.25 to 18 GHz
Insertion loss	≤2.3dB@DC~18GHz
Velocity of propagation	76%
Phase stability vs. Flexure	≤±10°@18 GHz (Wrapped around a 50mm diameter mandrel)
Amplitude stability vs. Flexure	≤±0.1 dB@18 GHz (Wrapped around a 50mm diameter mandrel)
Minimum bending radius	50.8 mm
Cable Diameter(with armor)	7.7 mm
Temperature range(Operation)	-40°C∼+125°C
RoHS	compliant
Length A	1000±10 mm
Length C	100±10 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.



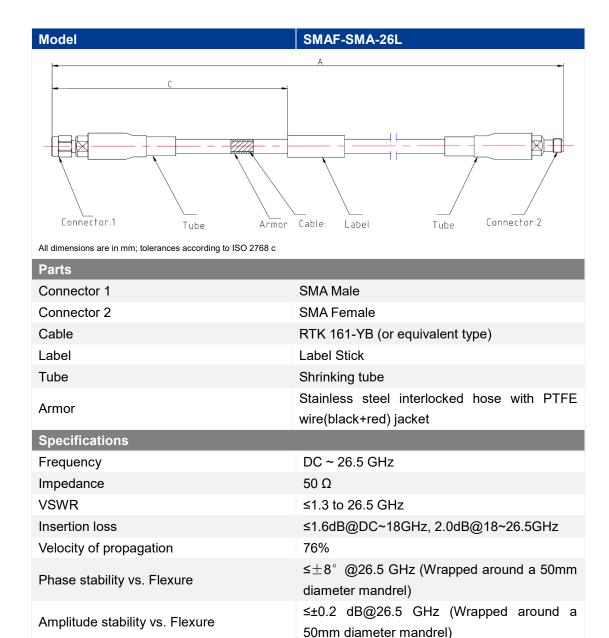


Parts	
Connector 1	SMA Male
Connector 2	SMA Male
Cable	RTK Flex 402-YB Low IL(or equivalent type)
Label	Label Stick
Tube	Shrinking tube
Armor	Stainless steel interlocked hose with PTFE
Allioi	wire(black+red) jacket

Specifications	
Frequency	DC ~ 26.5 GHz
Impedance	50 Ω
VSWR	≤1.3 to 26.5 GHz
Insertion loss	≤2.0 dB@DC~18 GHz
Velocity of propagation	76%
Phase stability vs. Flexure	≤±8°@26.5 GHz (Wrapped around a 50mm diameter mandrel)
Amplitude stability vs. Flexure	≤±0.2 dB@26.5 GHz (Wrapped around a 50mm diameter mandrel)
Minimum bending radius	50.8 mm
Cable Diameter(with armor)	7.7 mm
Temperature range(Operation)	-40°C∼+100°C
RoHS	compliant
Length A	1000±10 mm
Length C	200±10 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.





RoHS

Length A

Length C

Minimum bending radius

Cable Diameter(with armor)

Temperature range(Operation)

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.

38.5 mm

7.7 mm

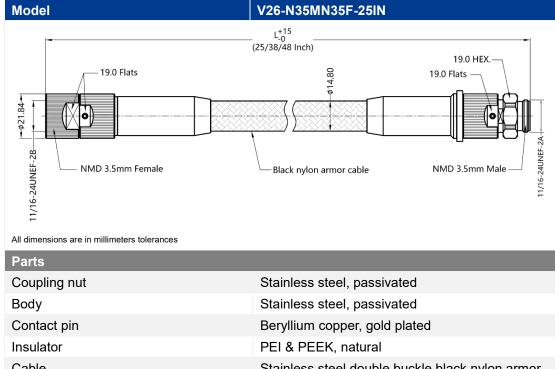
compliant

-40°C∼+125°C

1000±10 mm

200±10 mm

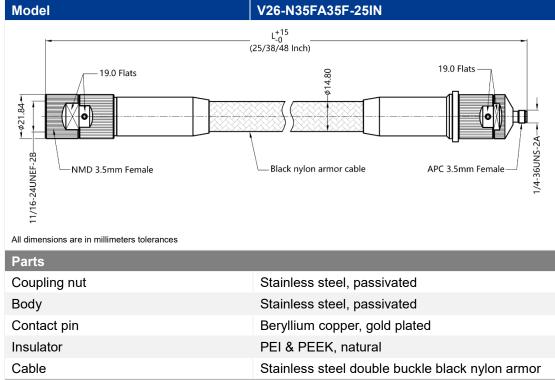




Insulator	PEI & PEEK, natural
Cable	Stainless steel double buckle black nylon armor
Specifications	
Frequency	DC ~ 26.5 GHz
Impedance	50 Ω
VSWR	≤1.25
Insertion loss	≤2.16 dB
Velocity of propagation	76%
Mechanical phase stability	≤±2.7°
Mechanical amplitude stability	≤±0.08 dB
Min. bending radius static	74 mm
Min. bending radius dynamic	148 mm
Recommended coupling torque	9-14 in-lbs
Coupling nut retention force	100 lbs
Durability	50,000 Cycles(FLEX)
Voltage rating	325 Vrms
Dielectric withstanding voltage	750V(DC)
Insulation resistance	5000 ΜΩ
Temperature range(Operation)	-40℃~+85℃
RoHS & REACH	compliant
Length	635 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.

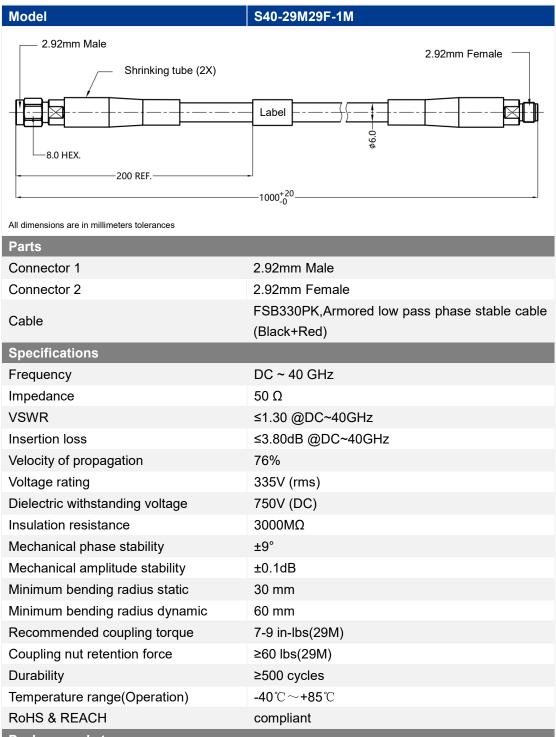




Capie	Stairliess steel double buckle black flylori armol
Specifications	
Frequency	DC ~ 26.5 GHz
Impedance	50 Ω
VSWR	≤1.25
Insertion loss	≤2.16 dB
Velocity of propagation	76%
Mechanical phase stability	≤±2.7°
Mechanical amplitude stability	≤±0.08 dB
Min. bending radius static	74 mm
Min. bending radius dynamic	148 mm
Recommended coupling torque	9-14 in-lbs
Coupling nut retention force	100 lbs
Durability	50,000 Cycles(FLEX)
Voltage rating	325 Vrms
Dielectric withstanding voltage	750V(DC)
Insulation resistance	5000 ΜΩ
Temperature range(Operation)	-40℃~+85℃
RoHS & REACH	compliant
Length	635 mm

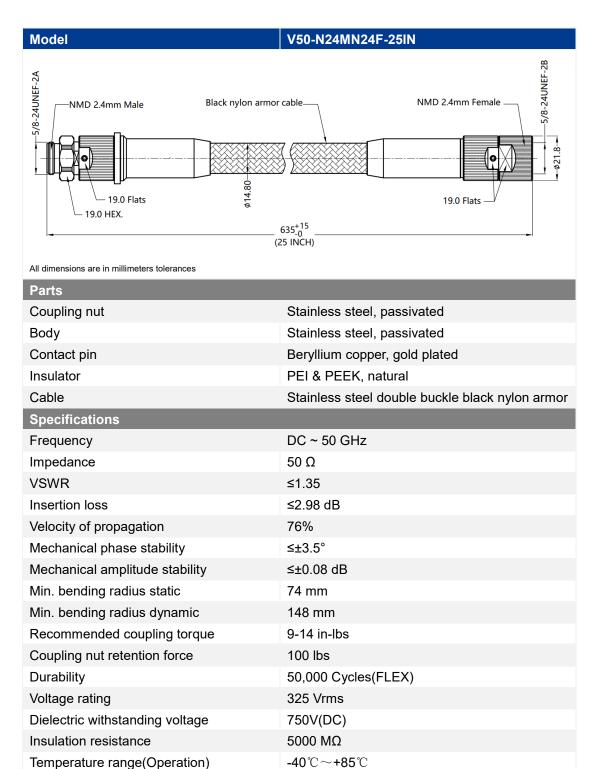
The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.





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RoHS & REACH

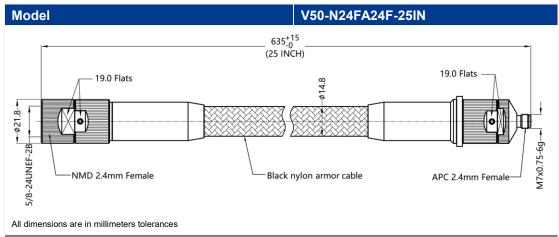
Length

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.

compliant

635 mm



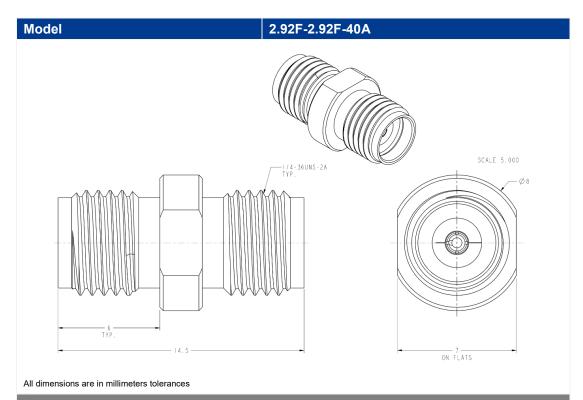


Parts	
Coupling nut	Stainless steel, passivated
Body	Stainless steel, passivated
Contact pin	Beryllium copper, gold plated
Insulator	PEI & PEEK, natural
Cable	Stainless steel double buckle black nylon armor

Specifications	
Frequency	DC ~ 50 GHz
Impedance	50 Ω
VSWR	≤1.35
Insertion loss	≤2.98 dB
Velocity of propagation	76%
Mechanical phase stability	≤±3.5°
Mechanical amplitude stability	≤±0.08 dB
Min. bending radius static	74 mm
Min. bending radius dynamic	148 mm
Recommended coupling torque	9-14 in-lbs
Coupling nut retention force	100 lbs
Durability	10,000 Cycles
Voltage rating	325 Vrms
Dielectric withstanding voltage	750V(DC)
Insulation resistance	5000 ΜΩ
Temperature range(Operation)	-40℃~+85℃
RoHS & REACH	compliant
Length	635 mm

The connector is encapsulated with a special dust cap. When the components are bent and packaged, the bending radius should not be less than 5 times the minimum bending radius of the cable.



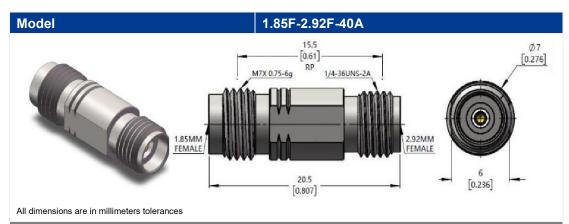


Parts	
Connector	2.92mm Female - 2.92mm Female
Body	Stainless sheet, passivated
Contact	Beryllium copper, gold plated
Insulator	PEI, NATURAL

Specifications	
Frequency	DC ~ 40 GHz
Impedance	50 Ω
VSWR	1.25 Max.
Insertion loss	0.3 dB Max.
Dielectric withstand voltage	1000 VRMS Min.
Temperature range(Operation)	-40℃~+85℃
Durability	2000 cycles

The connector is encapsulated with a special dust cap. The storage conditions of the product are: -10 $^{\circ}$ C $^{\circ}$ +40 $^{\circ}$ C, the relative humidity is not more than 80%, and the surrounding air is free from acidic, alkaline and other corrosive gases.





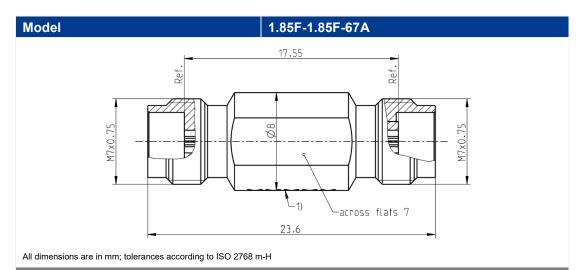
Parts	
Connector	1.85mm Female - 2.92mm Female
Body	Stainless sheet, passivated
Contact	Beryllium copper, gold plated
Insulator	PEI
Specifications	
Frequency	DC ~ 40 GHz
Impedance	50 Ω
VSWR	1.15 Typ ; 1.20 Max
Insertion loss	0.05*Sqt(f_GHz)
Insulation Resistance	5000 ΜΩ

Temperature range(Operation)

The connector is encapsulated with a special dust cap. The storage conditions of the product are: -10°C \sim +40°C, the relative humidity is not more than 80%, and the surrounding air is free from acidic, alkaline and other corrosive gases.

-55℃~+165℃





Parts	
Connector	1.85mm Female – 1.85mm Female
Body	Stainless sheet, passivated
Contact	CuBe, gold plated
Insulator	PEEK

Specifications	
Frequency	DC ~ 67 GHz
Impedance	50 Ω
Return loss	≥ 17 dB @ DC to 67 GHz
Insertion loss	$\leq 0.05*Sqt(f_GHz)$
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 4 mΩ
Outer contact resistance	≤ 2.5 mΩ
Test voltage	500 V rms
Working voltage	150 V rms
RF-leakage	≥ 100 dB up to 1.0 GHz
Mating cycles RPC-1.85	≥ 500
Center contact captivation	axial: ≥ 20 N, Radial: ≥ 1 Ncm
Coupling test torque	≤ 1.65 Nm
Recommended torque	0.8 Nm to 1.1 Nm
Temperature range	-55℃~+165℃
RoHS	compliant

The connector is encapsulated with a special dust cap. The storage conditions of the product are: -10 $^{\circ}$ C $^{\circ}$ +40 $^{\circ}$ C, the relative humidity is not more than 80%, and the surrounding air is free from acidic, alkaline and other corrosive gases.





Parts	
N(M)-SMA(M) Cable	DC ~ 6 GHz, VSWR<1.25, 700 mm
N(M)-N(M) Cable	DC ~ 6 GHz, VSWR<1.25, 700 mm
2* N(M)-BNC(F) Adaptor	DC ~ 2 GHz, VSWR<1.2
2* N(M)-SMA(F) Adaptor	DC ~ 6 GHz, VSWR<1.2
10 dB attenuator N-N	DC ~ 6 GHz, VSWR<1.2, Power:1 W, 50 mm×16
	mm

The connector is encapsulated with a special dust cap. The storage conditions of the product are: -10°C \sim +40°C, the relative humidity is not more than 80%, and the surrounding air is free from acidic, alkaline and other corrosive gases.



About SIGLENT

SIGLENT is an international high-tech company, concentrating on R&D, sales, production and services of electronic test & measurement instruments.

SIGLENT first began developing digital oscilloscopes independently in 2002. After more than a decade of continuous development, SIGLENT has extended its product line to include digital oscilloscopes, isolated handheld oscilloscopes, function/arbitrary waveform generators, RF/MW signal generators, spectrum analyzers, vector network analyzers, digital multimeters, DC power supplies, electronic loads and other general purpose test instrumentation. Since its first oscilloscope was launched in 2005, SIGLENT has become the fastest growing manufacturer of digital oscilloscopes. We firmly believe that today SIGLENT is the best value in electronic test & measurement.

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