

Semi-Rigid & Flexible Cable Assembly **0.047", 0.085", 0.141" & 0.250" Type**

Withwave's Semi-Rigid and Flexible Cable Assemblies have different types of cable outer diameters with 0.047", 0.085", 0.141" & 0.250" for various kinds of application according to customer's requirement.

■ Features

- Center Conductor : Silver plated Copper wire
- Dielectric core : Solid PTFE
- Jacket : Copper tubing, Tin-plated



■ Specification (Semi-Rigid type)

Scope	Specification	SR047	SR085	SR141
Physical	Center Conductor (mm)	0.29	0.51	0.92
	Dielectric (mm)	0.92	1.68	2.98
	Jacket (mm)	1.19	2.20	3.58
Electrical	Impedance (Ohm)		50	
	Operation Freq.(GHz)	20	20	20
	Velocity of propagation(%)		69.5	
	Capacitance (pF/ft)	32	32	29.9
	Shielding Effectiveness (dB)		100	
Mechanical & Environmental	Weight (g/M)	5.7	20.2	46.7
	Operation Temperature		-40~ +125°C	

■ Specification (Semi-Flexible type)

Scope	Specification	SF047	SF085	SF141
Physical	Center Conductor	0.29	0.54	0.95
	Dielectric	0.92	1.68	2.98
	Jacket	1.19	2.18	3.58
Electrical	Impedance (Ohm)		50	
	Operation Freq.(GHz)	20	20	20
	Velocity of propagation(%)		69.5	
	Capacitance (pF/ft)	32	32	20
	Shielding Effectiveness (dB)		100	
Mechanical & Environmental	Weight (g/M)	5.7	16.0	45
	Operation Temperature		-40~ +125°C	

Semi-Rigid & Flexible Cable Assembly 047", 085", 141" & 250" Type

■ Specification (Semi-Flexible type with Blue Jacket)

Scope	Specification	SF085B	SF141B
Physical	Center Conductor	0.54	0.95
	Dielectric	1.68	2.98
	Outer Shield	2.18	3.58
	Jacket (Color : Blue)	2.80	4.20
Electrical	Impedance (Ohm)	50 Ohm	
	Operation Freq.(GHz)	20	20
	Velocity of propagation(%)	69.5	
	Capacitance (pF/ft)	32	20
	Shielding Effectiveness (dB)	100	
Mechanical & Environmental	Weight (g/M)	16.0	45
	Operation Temperature	-40~ +125℃	

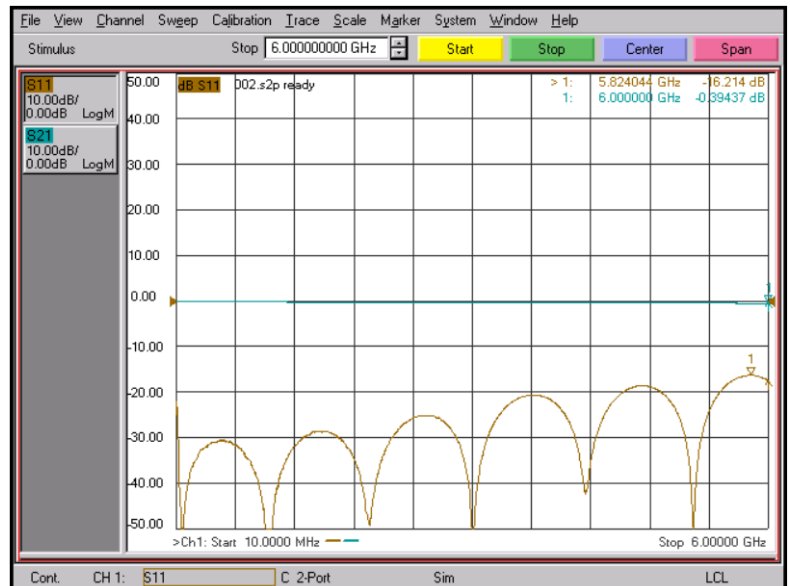


■ Test Result

SF047 cable Assembly

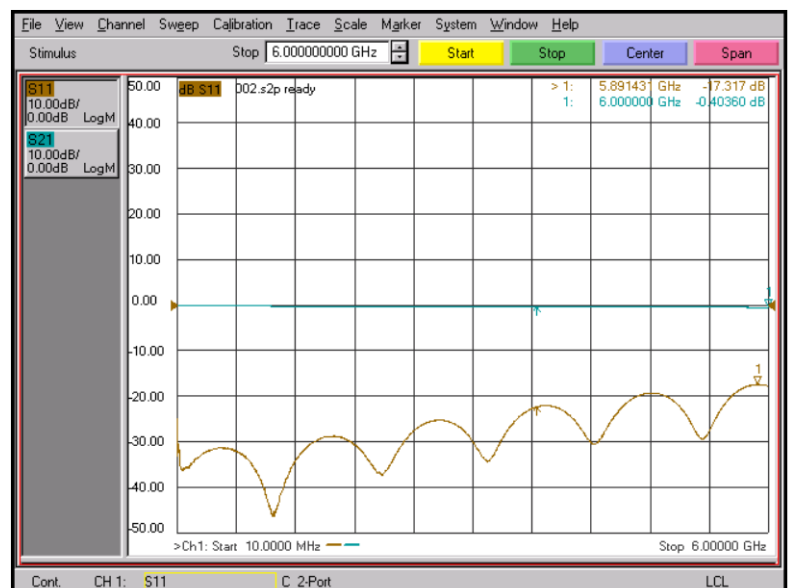
Part No: SF047-SM1SM1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.1 meter



Part No: SF047-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter



■ Test Result

SR047 cable Assembly

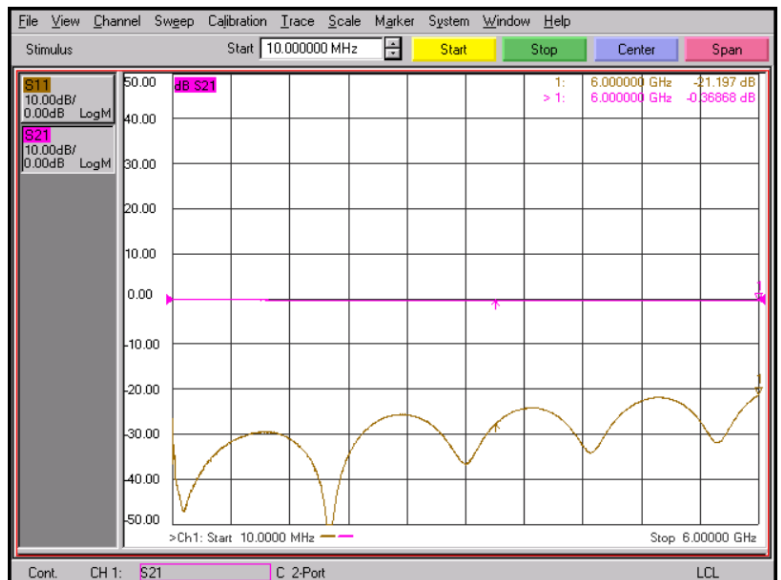
Part No: SR047-SM1SM1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.1 meter



Part No: SR047-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter



■ Test Result

SF085 cable Assembly

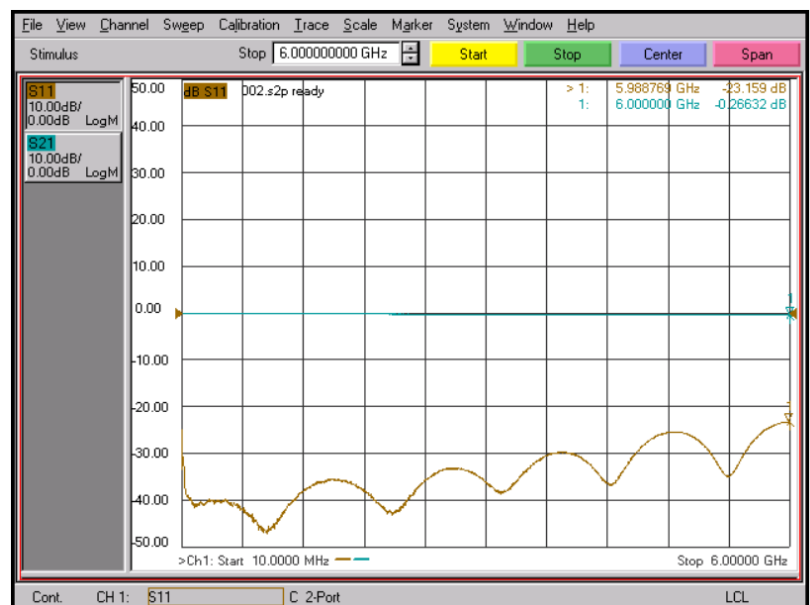
Part No: SF085-SM1SM1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SF085-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter



■ Test Result

SR085 cable Assembly

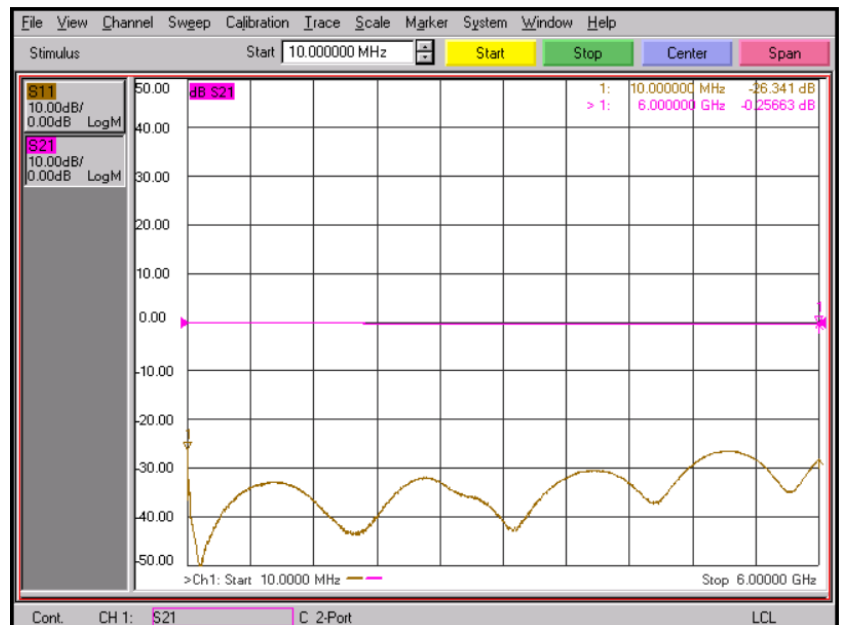
Part No: SR085-SM1SM1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.1 meter



Part No: SR085-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter

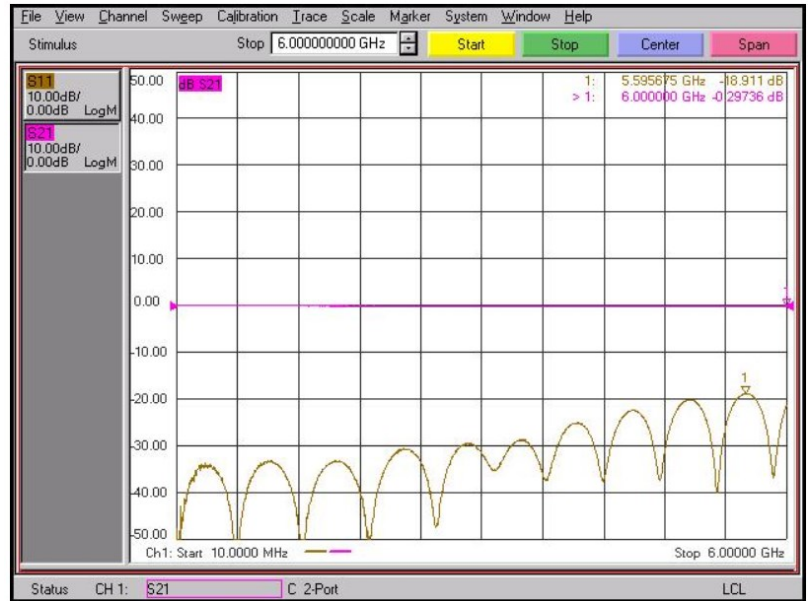


■ Test Result

SF141 cable Assembly

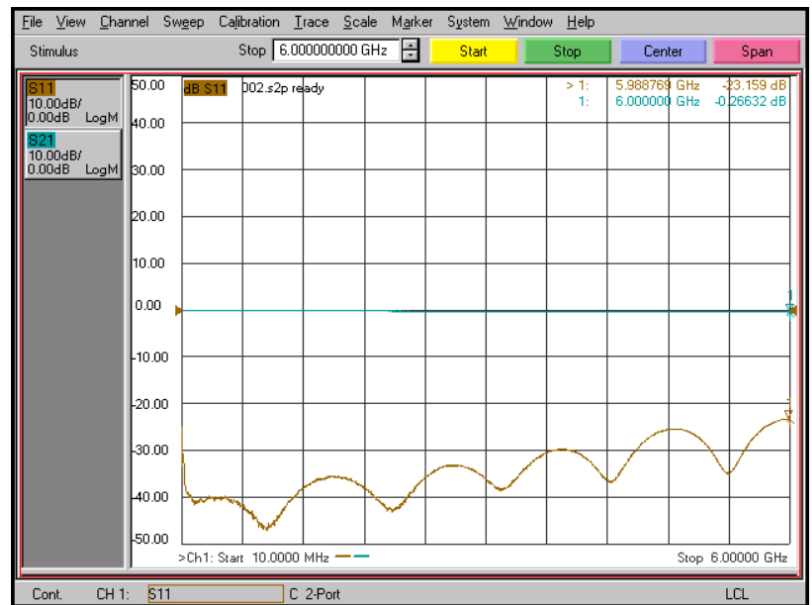
Part No: SF141-SM1SM1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SF141-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter



■ Test Result

SR141 cable Assembly

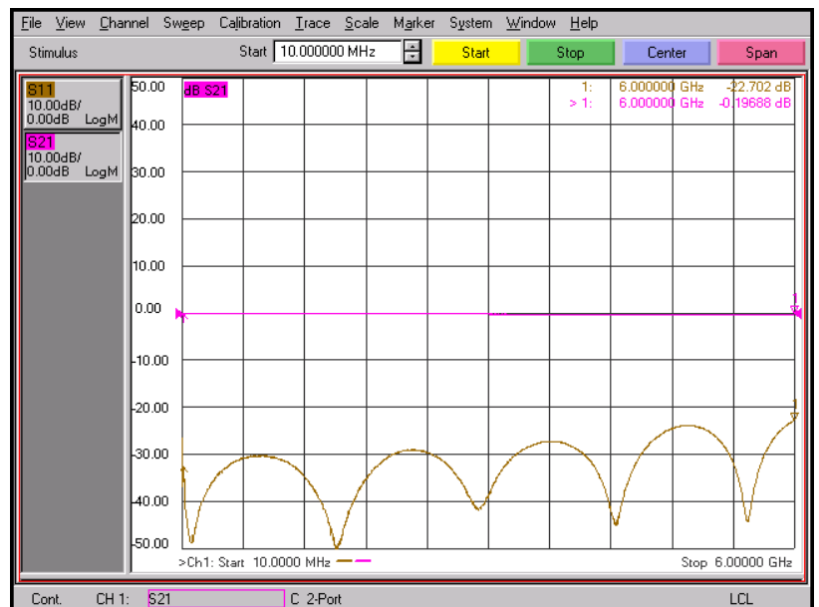
Part No: SR141-SM1SM1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SR141-SF1SF1-0.1M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.1 meter

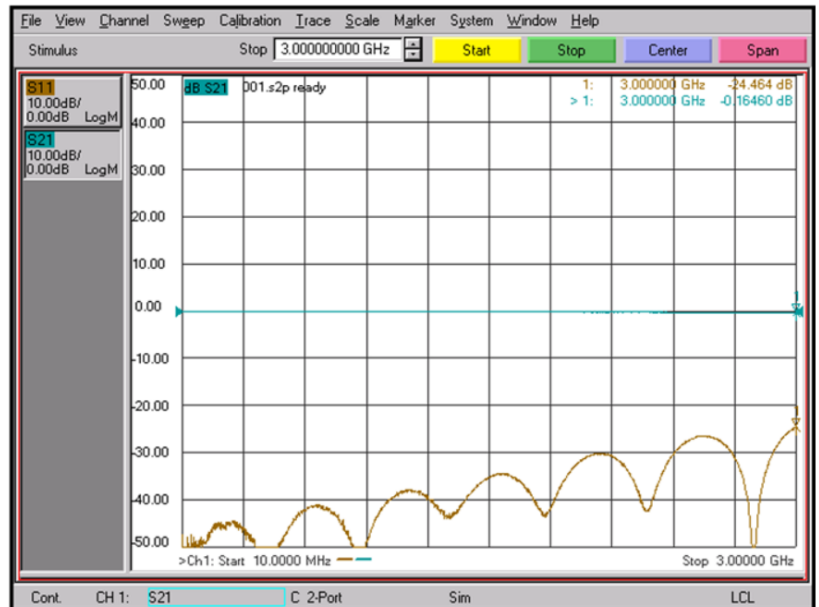


■ Test Result

SF250 cable Assembly

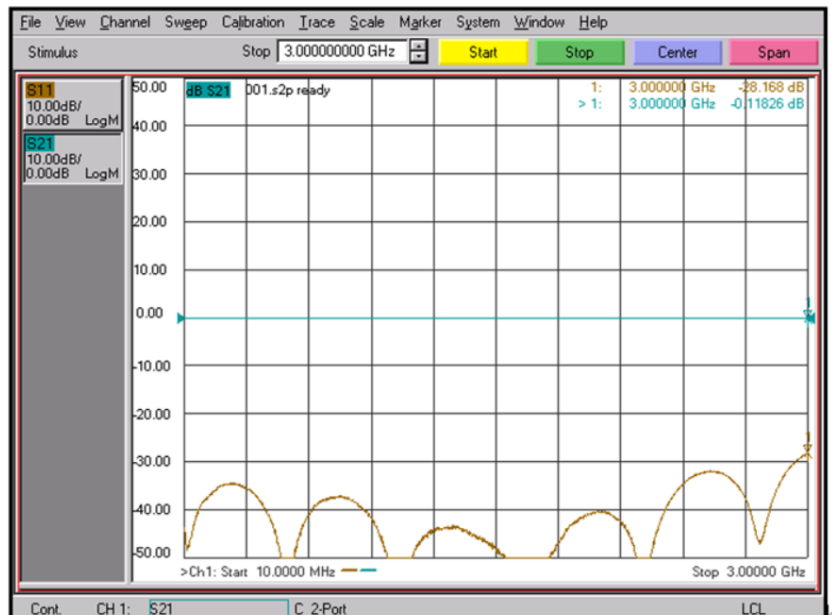
Part No: SF250-SM1SM1-0.2M

- Frequency : DC to 3 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SF250-NM1NM1-0.2M

- Frequency : DC to 3 GHz
- Connector : N-type(Male)
- Cable Length : 0.2 meter

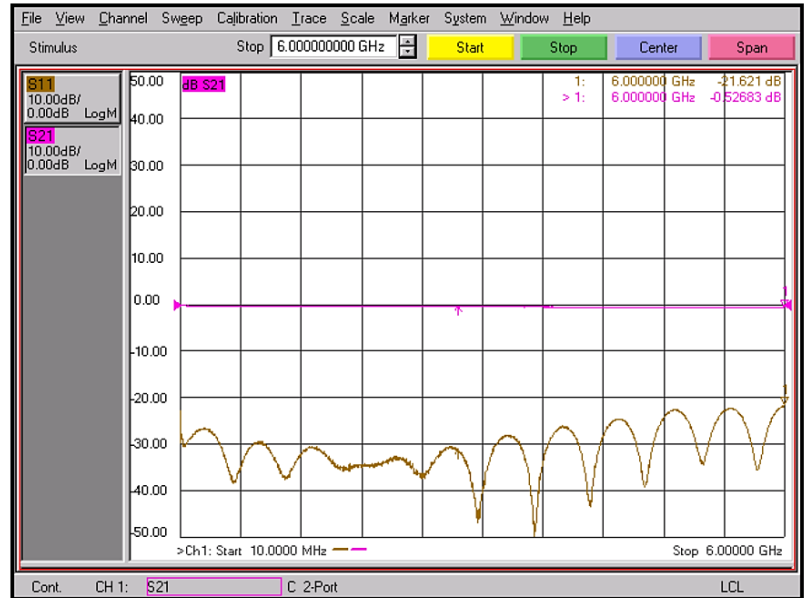
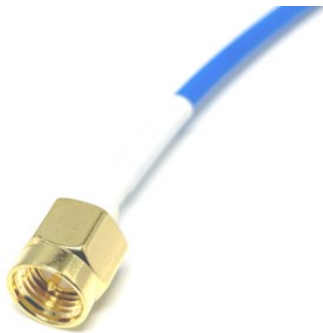


■ Test Result

SF085B cable Assembly

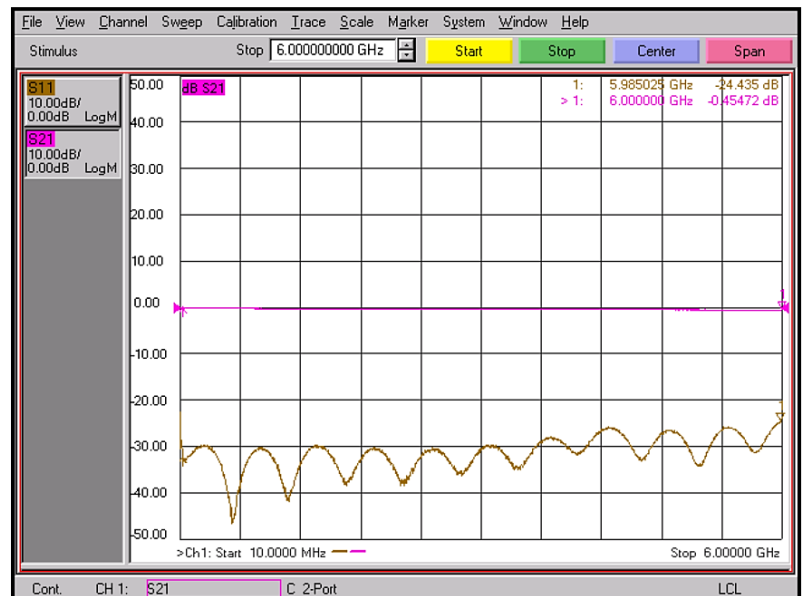
Part No: SF085B-SM1SM1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SF085B-SF1SF1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.2 meter

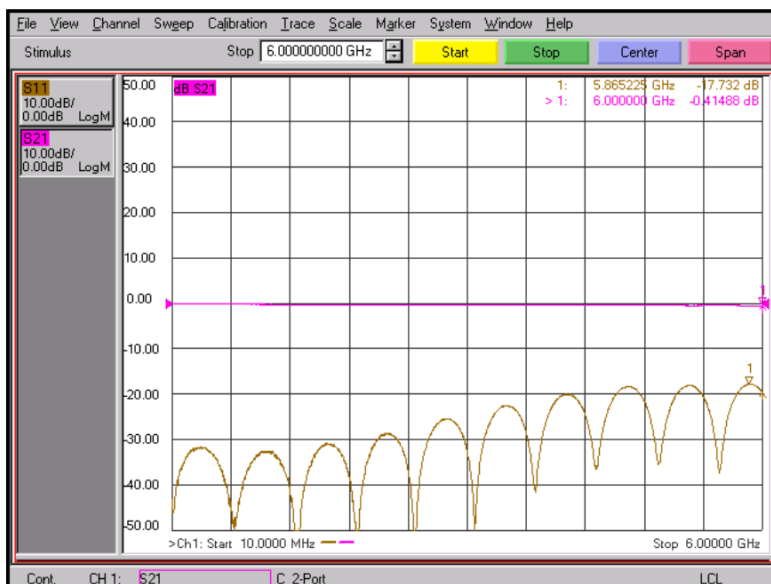


■ Test Result

SF085B cable Assembly

Part No: SF085B-NM1NM1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter

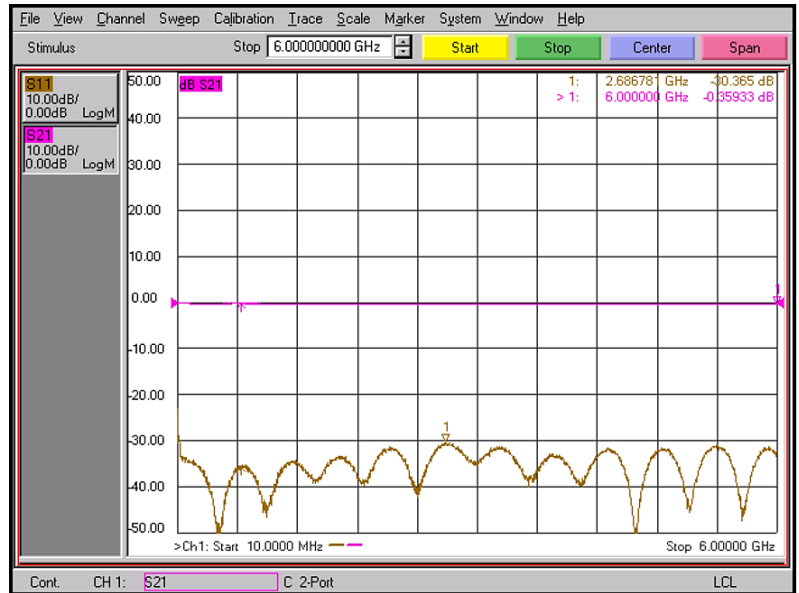


■ Test Result

SF141B cable Assembly

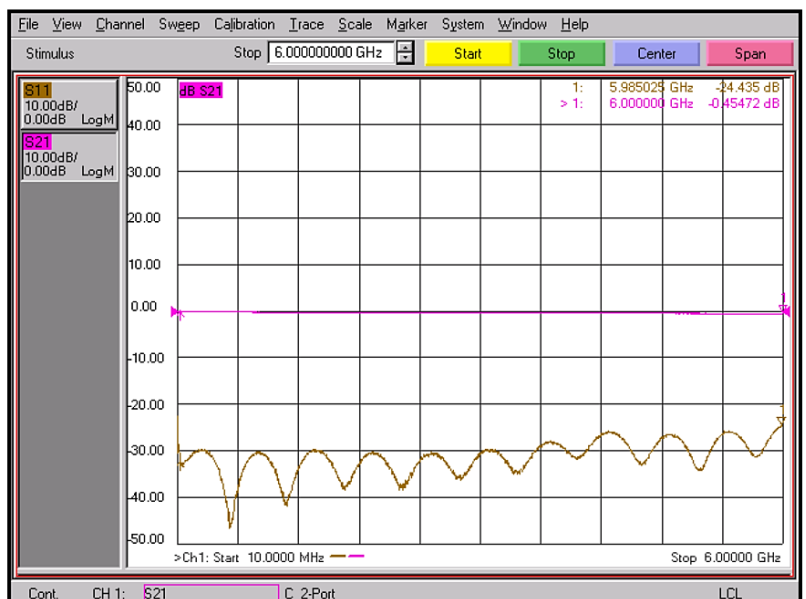
Part No: SF141B-SM1SM1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Male)
- Cable Length : 0.2 meter



Part No: SF141B-SF1SF1-0.2M

- Frequency : DC to 6 GHz
- Connector : SMA(Female)
- Cable Length : 0.2 meter

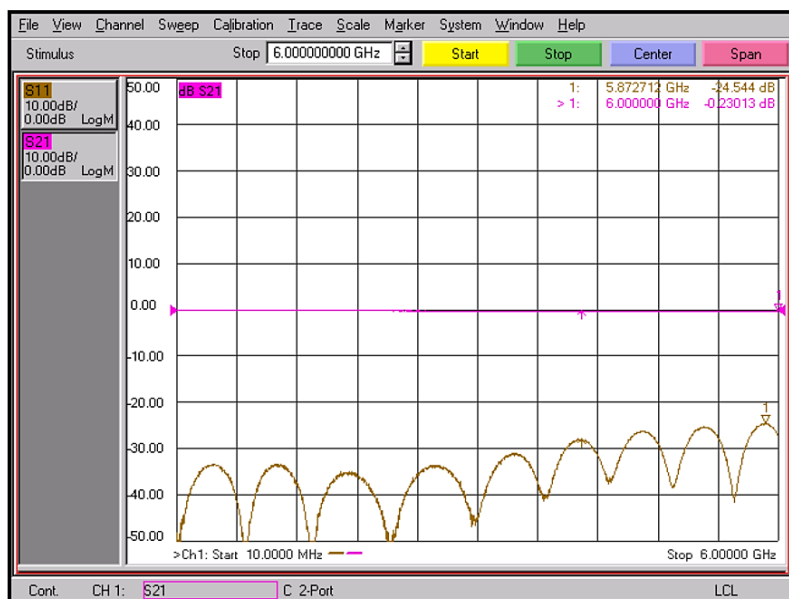


■ Test Result

SF141B cable Assembly

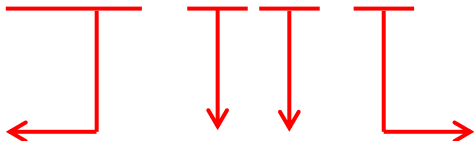
Part No: SF141B-NM1NM1-0.2M

- Frequency : DC to 6 GHz
- Connector : N-type (Male)
- Cable Length : 0.2 meter



■ Selection Guide

SR085 - SMSF - 1M



Cable Type

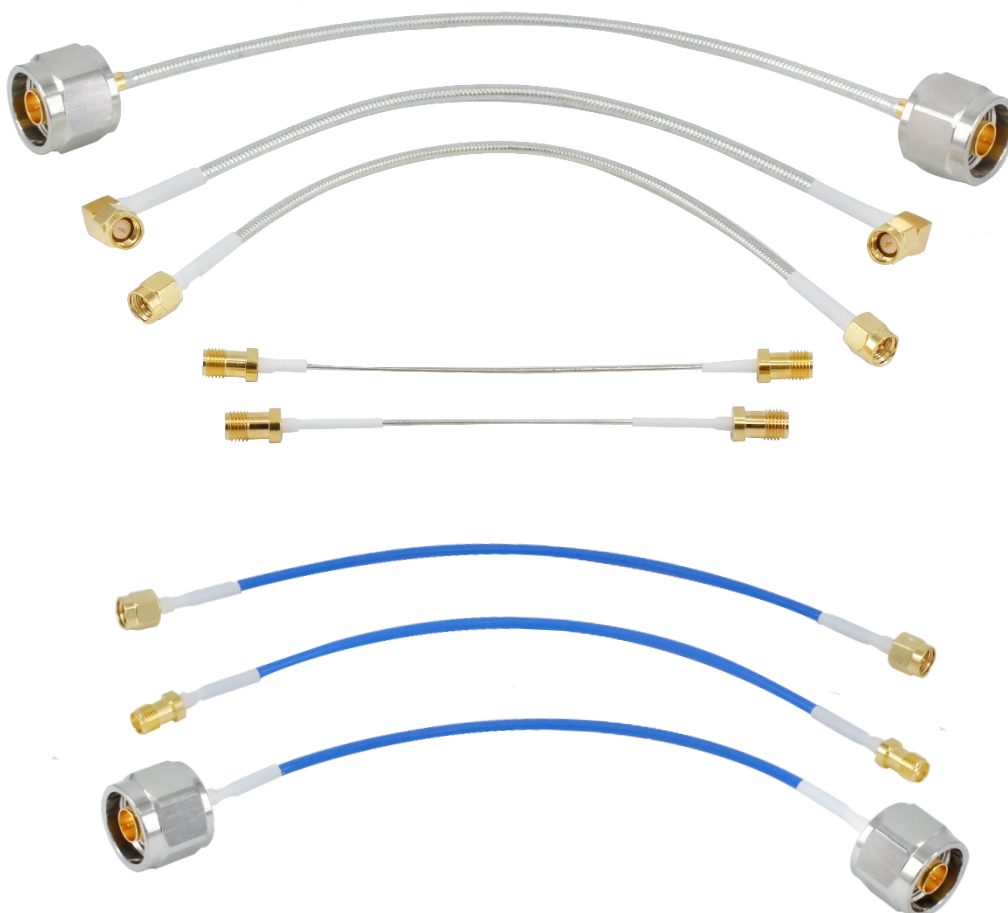
SR047
SR085
SR141
SF047
SF085
SF085B
SF141
SF141B
SF250

Connector Type

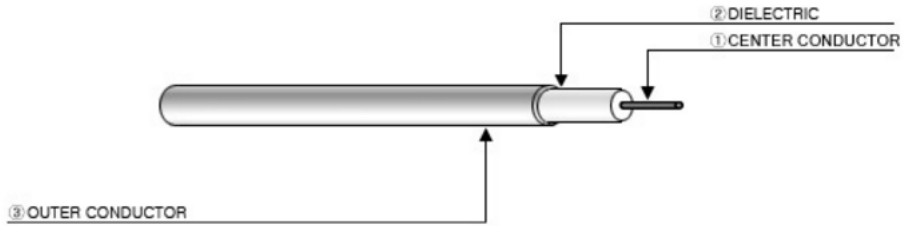
SM : SMA Male
SF : SMA Female
NM : N-Type Male
NF : N-Type Female

Cable Length

Unit : Meter

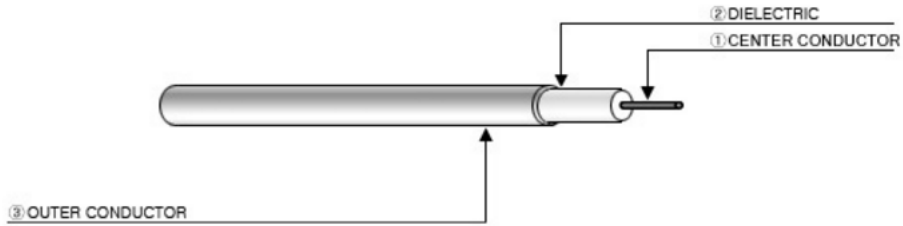


■ Cable Specification



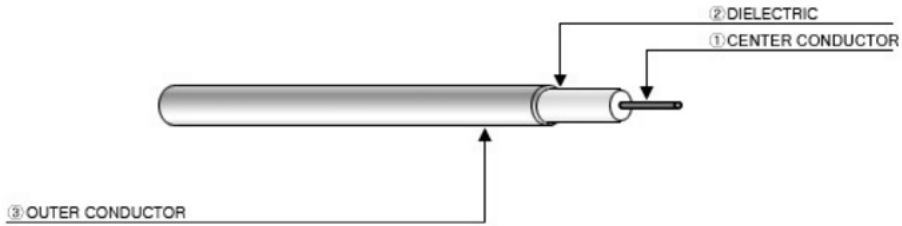
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.29±0.02	SPCW	
	2 Dielectric	0.92±0.03	PTFE	
	3 Outer Shield	1.19±0.03	TC	
Mechanical And Environmental Performance	Weight (g/m)			5.7
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.75	66.5	
	1000	1.09	47.0	
	5000	2.60	21.0	
	10000	3.75	15.3	
	20000	5.51	10.5	

■ Cable Specification



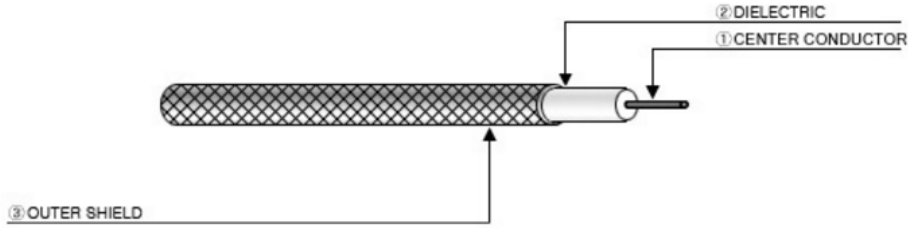
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.51±0.005	SPCW	
	2 Dielectric	1.68±0.030	PTFE	
	3 Outer Shield	2.20±0.025	TC	
Mechanical And Environmental Performance	Weight (g/m)			20.2
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.49	180.0	
	1000	0.72	130.0	
	5000	1.64	54.0	
	10000	2.62	35.0	
	20000	4.27	20.0	

■ Cable Specification



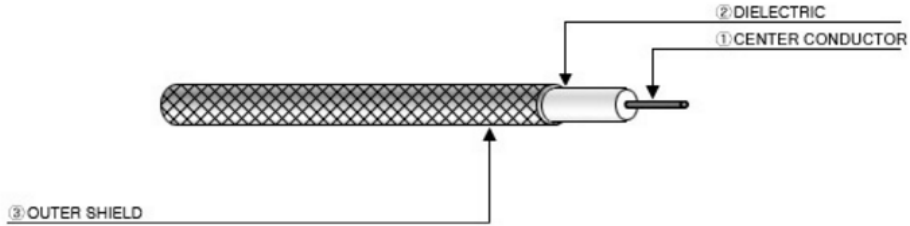
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			29.9 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.92±0.005	SPCW	
	2 Dielectric	2.98±0.050	PTFE	
	3 Outer Shield	3.58±0.050	TC	
Mechanical And Environmental Performance	Weight (g/m)			46.7
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.26	600.0	
	1000	0.39	450.0	
	5000	0.95	180.0	
	10000	1.48	120.0	
	20000	2.30	70.0	

■ Cable Specification



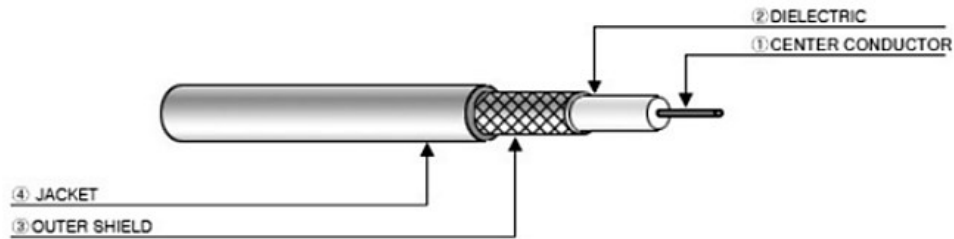
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.29±0.005	SPCW	
	2 Dielectric	0.92±0.050	PTFE	
3 Outer Shield	1.19±0.050	TC		
Mechanical And Environmental Performance	Weight (g/m)			5.7
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.75	17.7	
	1000	1.09	11.9	
	5000	2.60	5.1	
	10000	3.75	3.5	
	20000	5.51	-	

■ Cable Specification



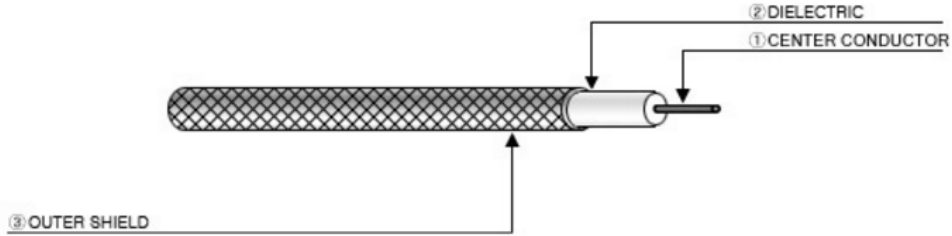
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.54±0.005	SPC	
	2 Dielectric	1.68±0.050	PTFE	
	3 Outer Shield	2.18±0.025	TC	
Mechanical And Environmental Performance	Weight (g/m)			16.0
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.49	37.4	
	1000	0.72	25.2	
	5000	1.64	10.8	
	10000	2.62	7.4	
	20000	4.27	-	

■ Cable Specification



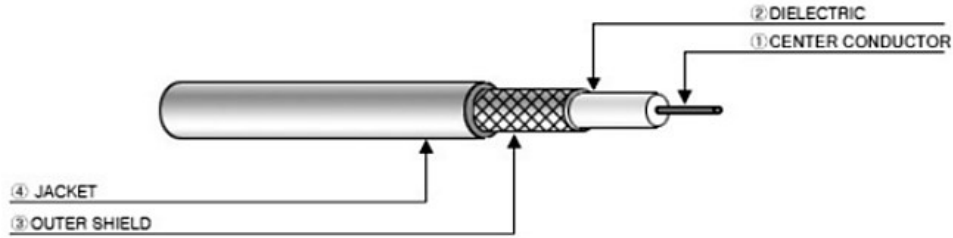
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.54±0.005	SPC	
	2 Dielectric	1.68±0.050	PTFE	
	3 Outer Shield	2.18±0.025	TC	
4 Jacket (BLUE)	2.80			
Mechanical And Environmental Performance	Weight (g/m)			16.0
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.49	37.4	
	1000	0.72	25.2	
	5000	1.64	10.8	
	10000	2.62	7.4	
	20000	4.27	-	

■ Cable Specification



Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			29.9 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.95±0.013	SPC	
	2 Dielectric	2.98±0.050	PTFE	
	3 Outer Shield	3.58±0.050	TC	
Mechanical And Environmental Performance	Weight (g/m)			45.0
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.26	600	
	1000	0.72	450	
	5000	1.64	180	
	10000	2.62	120	
	20000	4.27	70	

■ Cable Specification



Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			29.9 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.95±0.013	SPC	
	2 Dielectric	2.98±0.050	PTFE	
	3 Outer Shield	3.58±0.050	TC	
4 Jacket (BLUE)	4.20	FEP		
Mechanical And Environmental Performance	Weight (g/m)			45.0
	Operating Temperature Range (°C)			-40~+125
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.26	600	
	1000	0.72	450	
	5000	1.64	180	
	10000	2.62	120	
	20000	4.27	70	

■ Cable Specification



Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			18 GHz
	Impedance (Ohm)			50 ± 3
	Capacitance			29.9 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	1.65±0.03	SPC	
	2 Dielectric	5.35±0.05	PTFE	
	3 Outer Shield	6.30±0.05	TC	
	4 Jacket(Optional)	7.10±0.05	PVC/PE	
Mechanical And Environmental Performance	Weight (g/m)			114.0
	Operating Temperature Range (°C)			-55~+200
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.15	1,800	
	2000	0.37	1,050	
	5000	0.52	435	
	10000	1.08	282	

■ Cable Specification



Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			18 GHz
	Impedance (Ohm)			50 ± 3
	Capacitance			29.9 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	1.65±0.03	SPC	
	2 Dielectric	5.35±0.05	PTFE	
	3 Outer Shield	6.30±0.05	TC	
	4 Jacket(Optional)	7.10±0.05	PVC/PE	
Mechanical And Environmental Performance	Weight (g/m)			114.0
	Operating Temperature Range (°C)			-55~+200
Attenuation values	Freq MHz	dB /M	Average power (Watts)	
	500	0.15	1,800	
	2000	0.37	1,050	
	5000	0.52	435	
	10000	1.08	282	