

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



Microwave Farm'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	MFSR047	MFSR085	MFSR141
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	MFSF047	MFSF085	MFSF141
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

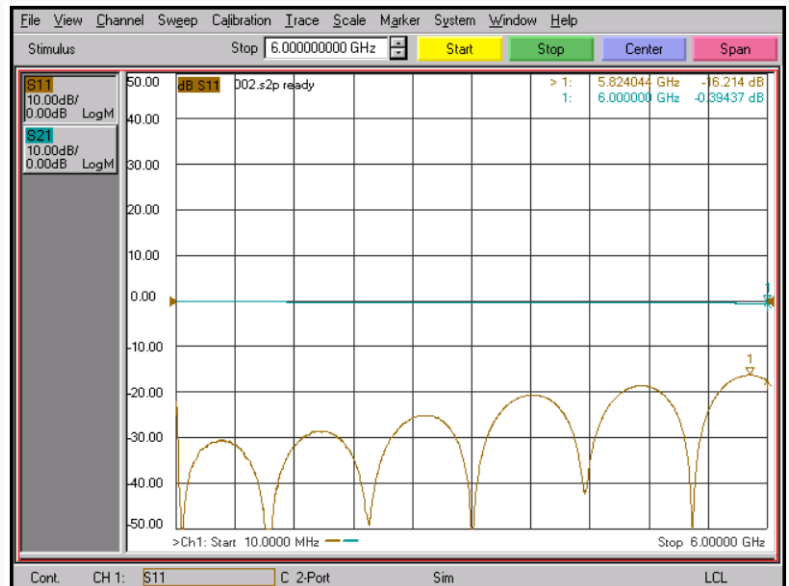


■ Test Result

MFSF047 cable Assembly

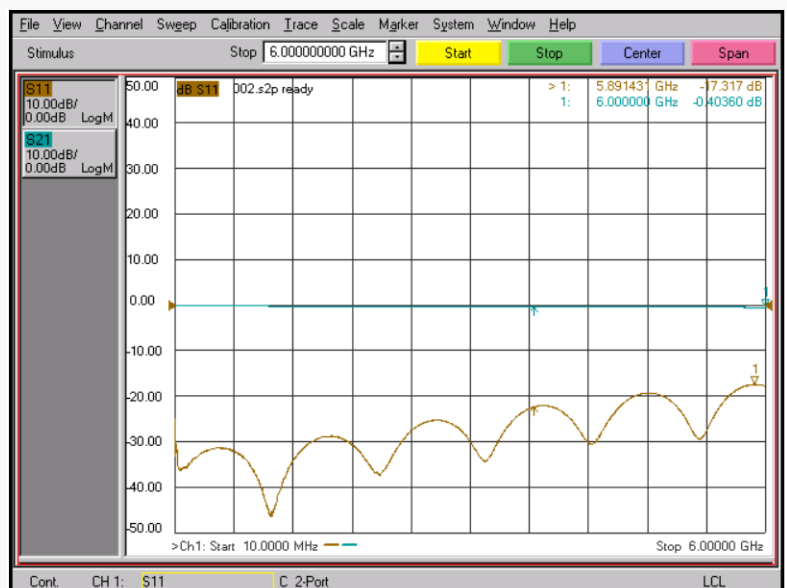
Part No: MFSF047-SM1SM1-0.1M

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



Part No: MFSF047-SF1SF1-0.1M

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



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

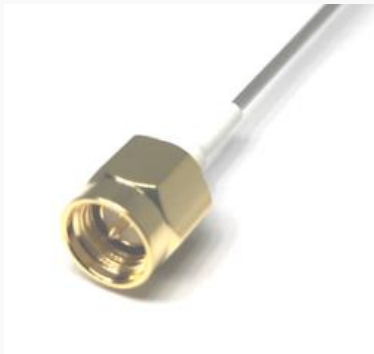


■ Test Result

MFSR047 cable Assembly

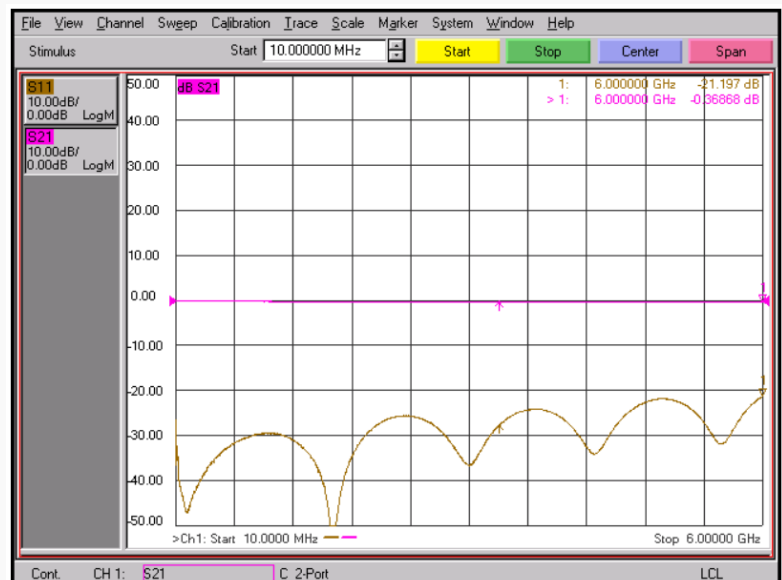
Part No: MFSR047-SM1SM1-0.1M

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



Part No: MFSR047-SF1SF1-0.1M

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



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

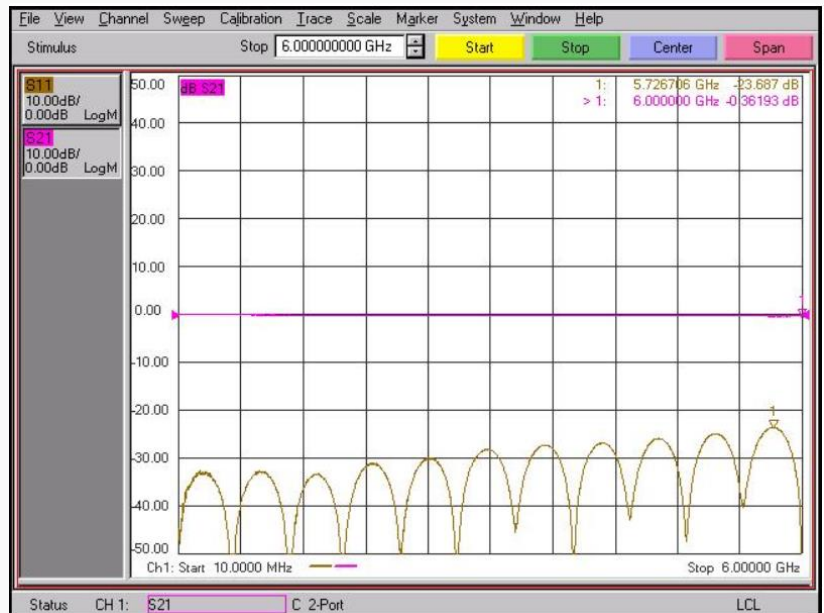


■ Test Result

MFSF085 cable Assembly

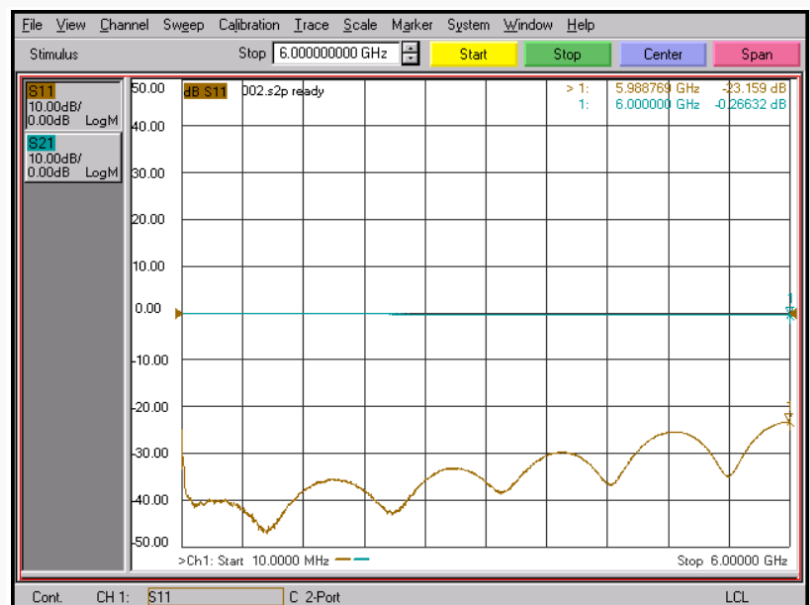
Part No: MFSF085-SM1SM1-0.2M

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



Part No: MFSF085-SF1SF1-0.1M

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



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

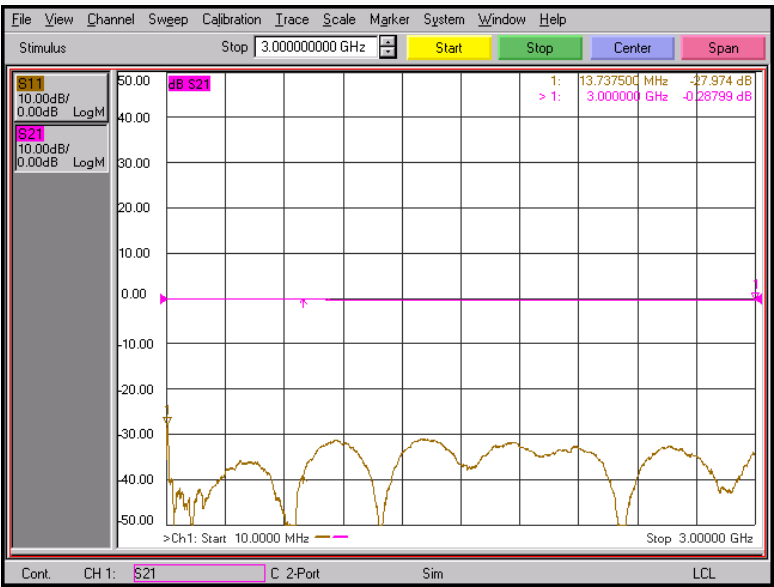


■ Test Result

MFSF085 cable Assembly

Part No: MFSF085-SMR1SMR1-0.2M

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



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

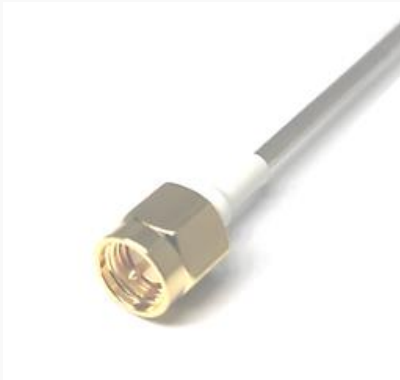


■ Test Result

MFSR085 cable Assembly

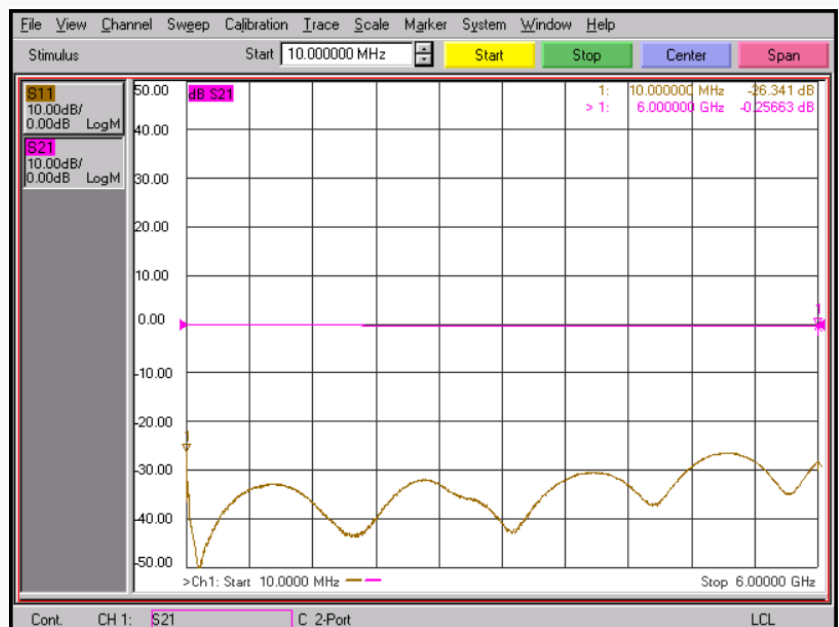
Part No: MFSR085-SM1SM1-0.1M

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



Part No: MFSR085-SF1SF1-0.1M

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



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

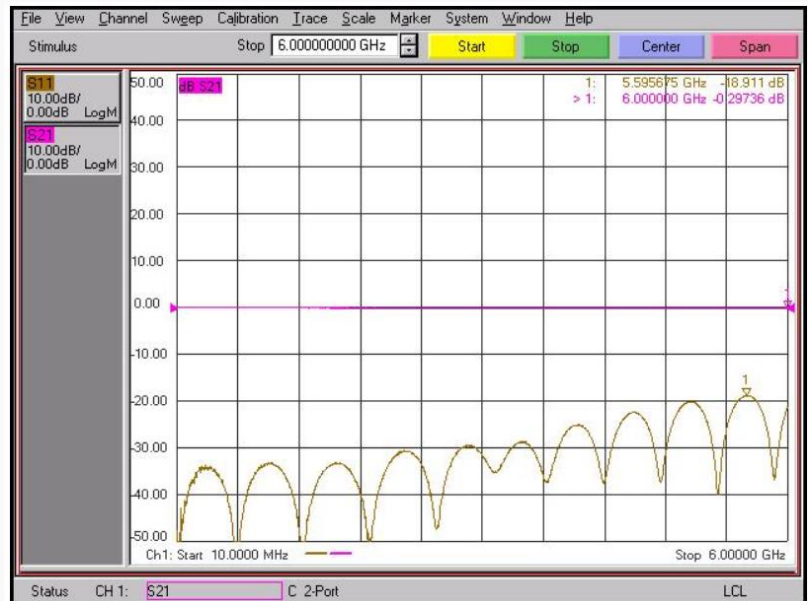


■ Test Result

MFSF141 cable Assembly

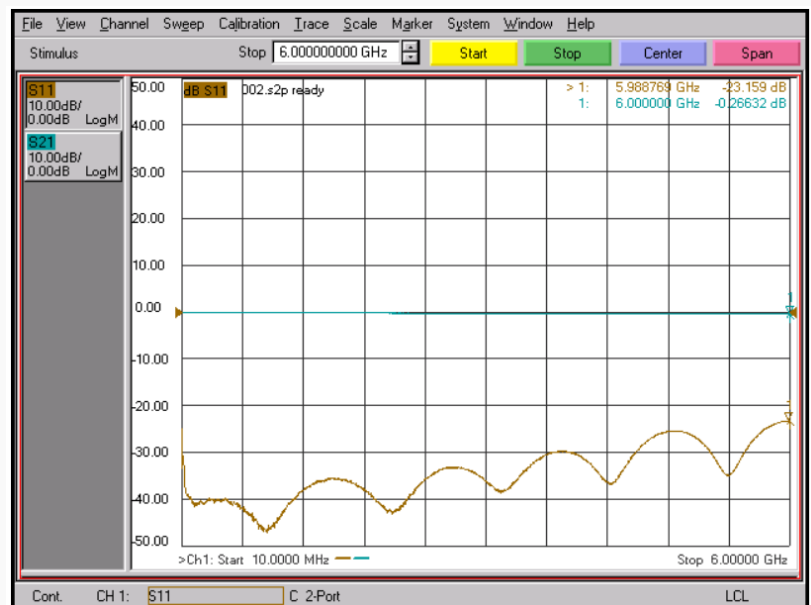
Part No: MFSF141-SM1SM1-0.2M

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



Part No: MFSF141-SF1SF1-0.1M

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



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

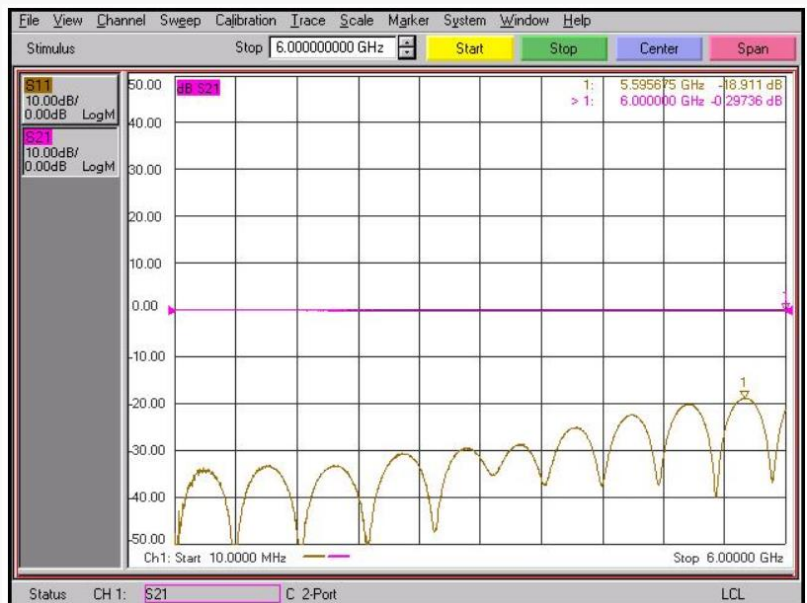


■ Test Result

MFSF141 cable Assembly

Part No: MFSF141-SMR1SMR1-0.2M

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



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



■ Test Result

MFSR141 cable Assembly

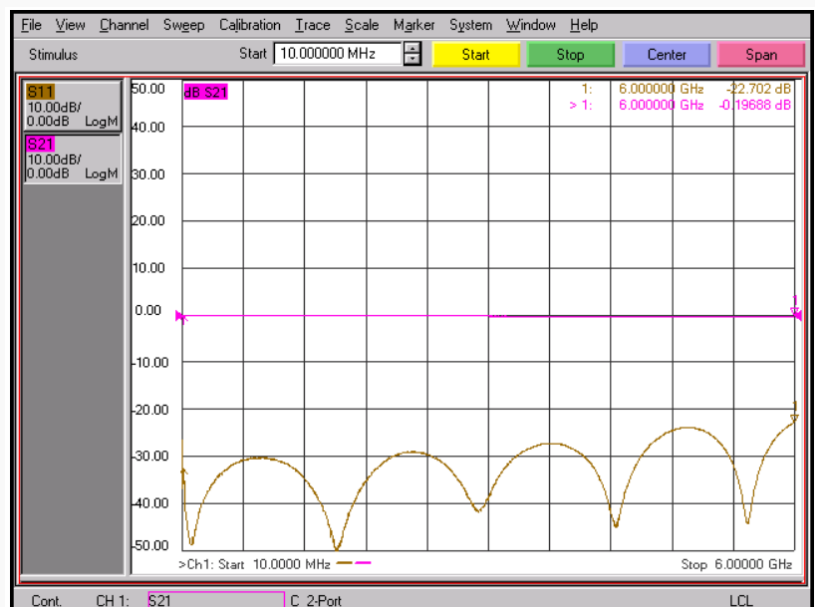
Part No: MFSR141-SM1SM1-0.1M

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



Part No: MFSR141-SF1SF1-0.1M

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



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

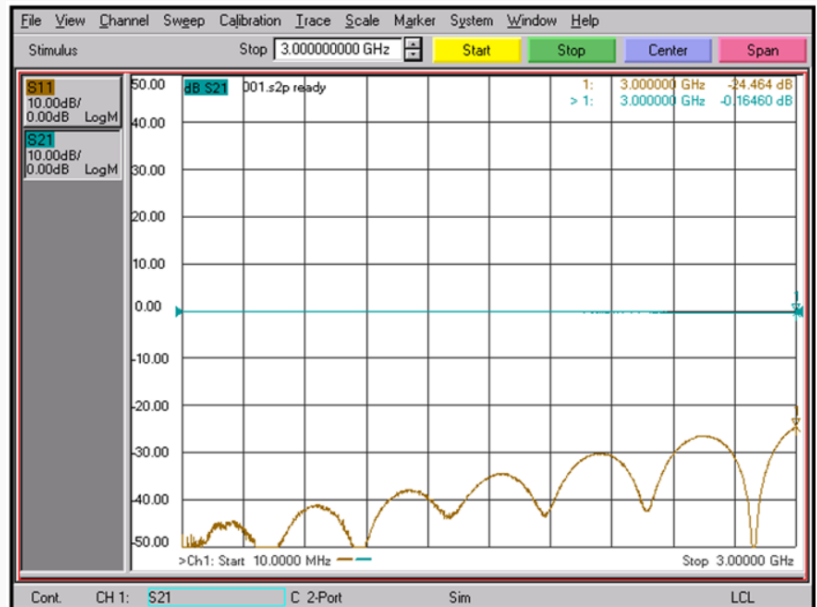


■ Test Result

MFSF250 cable Assembly

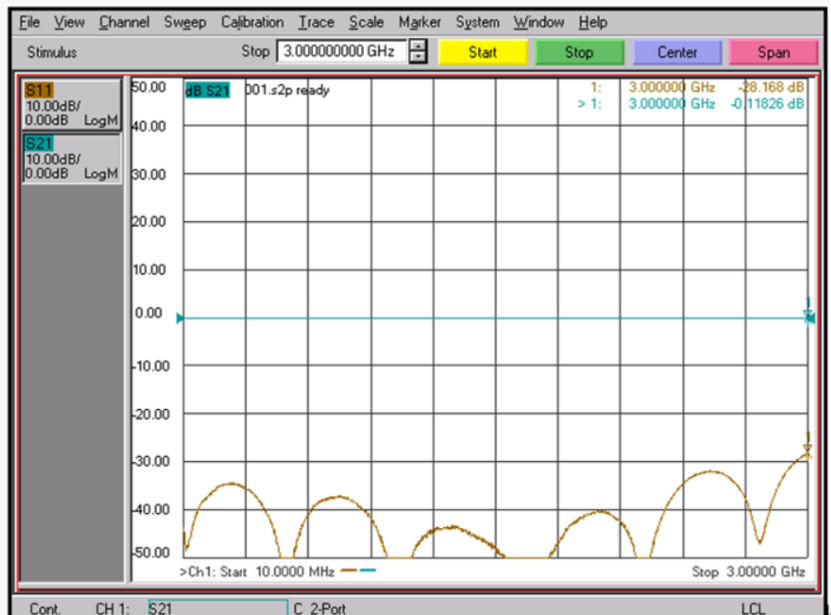
Part No: MFSF250-SM1SM1-0.2M

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

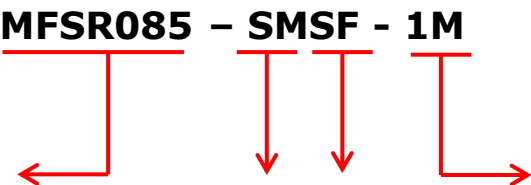


Part No: MFSF250-NM1NM1-0.2M

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



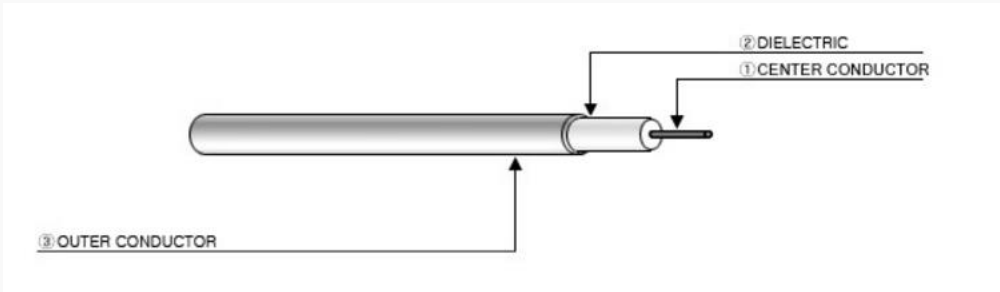
■ Selection Guide



Cable Type	Connector Type	Cable Length
MFSR047 MFSR085 MFSR141 MFSF047 MFSF085 MFSF141 MFSF250	SM : SMA Male SF : SMA Female NM : N-Type Male NF : N-Type Female	Unit : Meter



Cable Specification



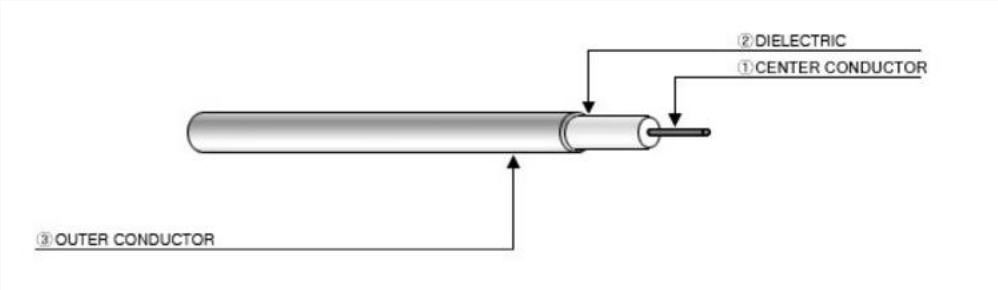
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.29±0.02	SPCW	
	2 Dielectric	0.92±0.03	PTFE	
	3 Outer 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	

MFSR085

Semi-Rigid Cable (0.085 inch)



Cable Specification



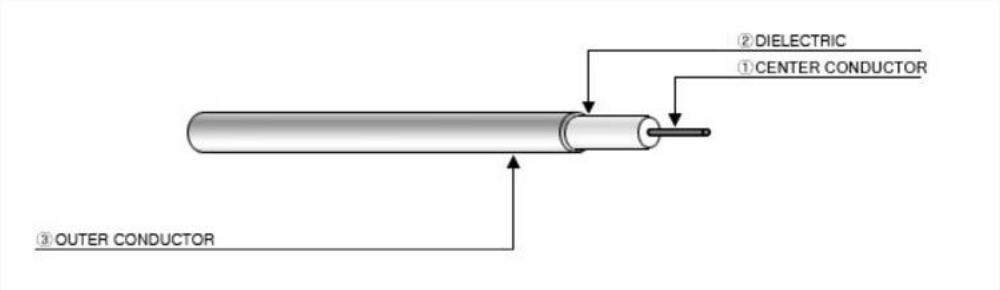
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.51±0.005	SPCW	
	2 Dielectric	1.68±0.030	PTFE	
	3 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	

MFSR141

Semi-Rigid Cable (0.141 inch)

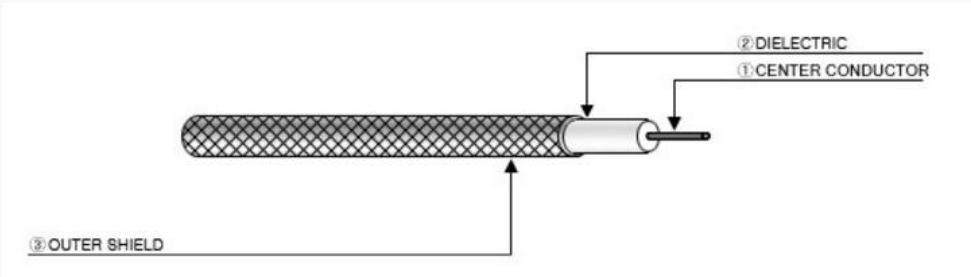


Cable Specification



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



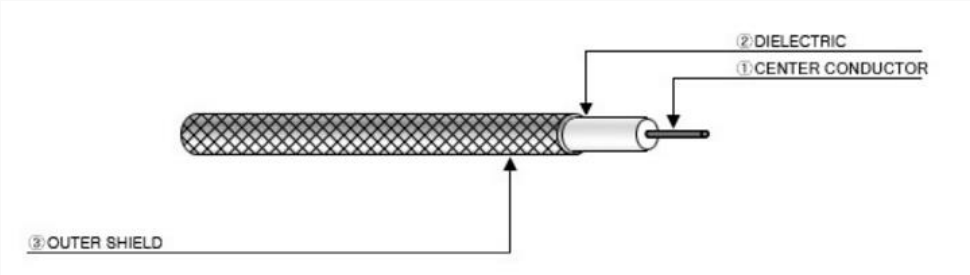
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.29±0.005	SPCW	
	2 Dielectric	0.92±0.050	PTFE	
	3 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	-	

MFSF085

Semi-Flexible Cable (0.085 inch)



Cable Specification



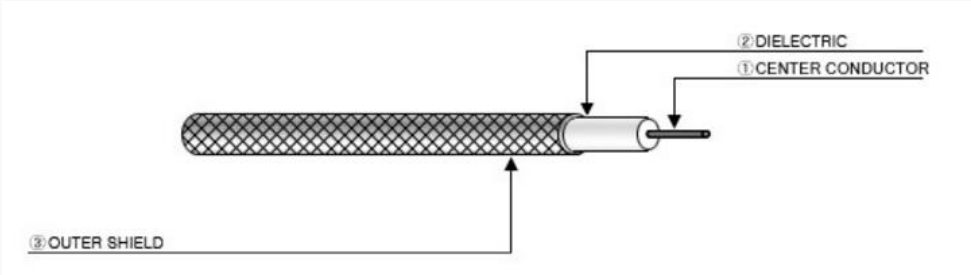
Scope	Item			Specification
Electrical Properties	Operating Frequency Range (GHz) : Max			20 GHz
	Impedance (Ohm)			50 ± 2
	Capacitance			32 pF/ft
	Velocity Propagation			69.5 %
Material & Construction	Structure	Size (mm)	Material	
	1 Center Conductor	0.54±0.005	SPC	
	2 Dielectric	1.68±0.050	PTFE	
	3 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	-	

MFSF141

Semi-Flexible Cable (0.141 inch)



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	

MFSF250

Semi-Flexible Cable (0.250 inch)



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	