MIL-C-17 Standard RF Coaxial Cable

Low Loss & Ultra Low Loss Microwave Cable

ANTENNA & TEST Cable up to 26.5 GHz

Low Loss Low Density PTFE Dielectric RF Microwave Coaxial Cables

Silver Plated Copper Spiral Strip Shield RF Microwave Coaxial Cables

Double & Single Braid Flexible RG Coaxial Cables

Semi-Flexible SF Coaxial Cables

Semi-Rigid SR Coaxial Cables

www.MIL-C-17.com

SF-047 NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.29 mm (0.0114 inch)	Solid
Dielectric	PTFE	0.94 mm (0.037 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	1.19 mm (0.047 inch)	100% Coverage

Electrical & Mechanical Data

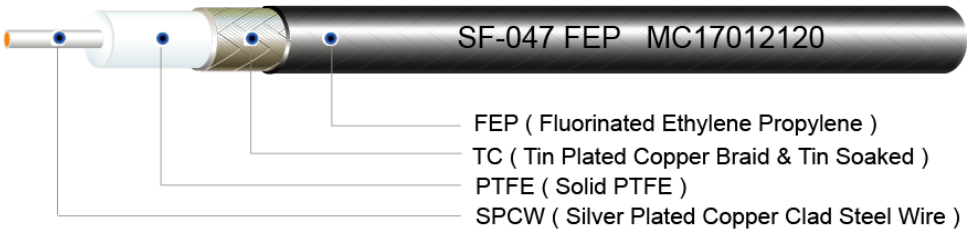
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70%
Capacitance	95 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	< -110 dB
Working Voltage	1,000 Vrms (Max.)
Weight	5.3 kg / km
Min. Bending Radius	3.2 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.91	0.277
1	1.29	0.393
5	2.85	0.868
10	3.99	1.216
18	5.49	1.673
20	5.87	1.789

SF-047 FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.29 mm (0.0114 inch)	Solid
Dielectric	PTFE	0.94 mm (0.037 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	1.19 mm (0.047 inch)	100% Coverage
Jacket	FEP	1.65 mm (0.065 inch)	

Electrical & Mechanical Data

Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70%
Capacitance	95 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,000 Vrms (Max.)
Weight	5.3 kg / km
Min. Bending Radius	3.2 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.91	0.277
1	1.29	0.393
5	2.85	0.868
10	3.99	1.216
18	5.49	1.673
20	5.87	1.789

SF-085 NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.53 mm (0.021 inch)	Solid
Dielectric	PTFE	1.65 mm (0.065 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	2.16 mm (0.085 inch)	100% Coverage

Electrical & Mechanical Data

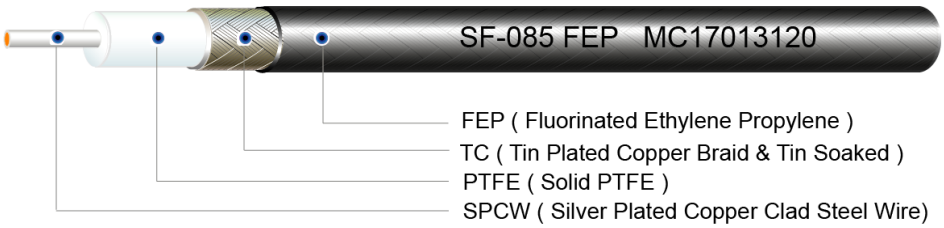
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70%
Capacitance	95 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1500 Vrms (Max.)
Weight	16.0 kg / km
Min. Bending Radius	6 mm (Single)

Attenuation

Frequency	Max. Attenuation	
(GHz)	(dB/m)	(dB/ft)
0.5	0.49	0.149
1	0.72	0.219
5	1.64	0.500
10	2.62	0.799
18	3.45	1.052
20	4.27	1.301

SF-085 FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.53 mm (0.021 inch)	Solid
Dielectric	PTFE	1.65 mm (0.065 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	2.16 mm (0.085 inch)	100% Coverage
Jacket	FEP	2.50 mm (0.098 inch)	

Electrical & Mechanical Data

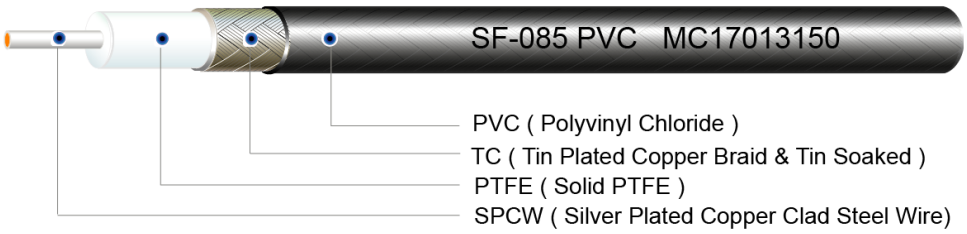
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70%
Capacitance	95 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1500 Vrms (Max.)
Weight	22.0 kg / km
Min. Bending Radius	6 mm (Single)

Attenuation

Frequency	Max. Attenuation	
(GHz)	(dB/m)	(dB/ft)
0.5	0.49	0.149
1	0.72	0.219
5	1.64	0.500
10	2.62	0.799
18	3.45	1.052
20	4.27	1.301

SF-085 PVC Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.53 mm (0.021 inch)	Solid
Dielectric	PTFE	1.65 mm (0.065 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	2.16 mm (0.085 inch)	100% Coverage
Jacket	PVC	3.20 mm (0.126 inch)	

Electrical & Mechanical Data

Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70%
Capacitance	95 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1500 Vrms (Max.)
Weight	22.0 kg / km
Min. Bending Radius	6 mm (Single)

Attenuation

Frequency	Max. Attenuation	
(GHz)	(dB/m)	(dB/ft)
0.5	0.49	0.149
1	0.72	0.219
5	1.64	0.500
10	2.62	0.799
18	3.45	1.052
20	4.27	1.301

SF-085_75Ω NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.29 mm (0.011 inch)	Solid
Dielectric	PTFE	1.65 mm (0.065 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	2.16 mm (0.085 inch)	100% Coverage

Electrical & Mechanical Data

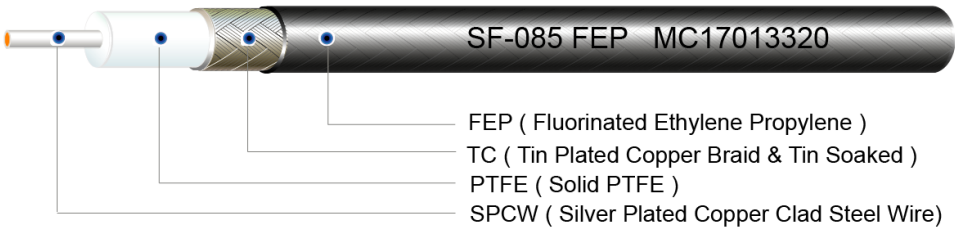
Characteristic Impedance	75 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	71%
Capacitance	62 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> - 110 dB
Working Voltage	1500 Vrms (Max.)
Weight	18.0 kg / km
Min. Bending Radius	6 mm (Single)

Attenuation

Frequency	Max. Attenuation	
(MHz)	(dB/m)	(dB/ft)
1	0.05	0.015
50	0.13	0.040
100	0.20	0.061
400	0.42	0.128
700	0.59	0.180
1000	0.72	0.220

SF-085_75Ω FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.29 mm (0.011 inch)	Solid
Dielectric	PTFE	1.65 mm (0.065 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	2.16 mm (0.085 inch)	100% Coverage
Jacket	FEP	2.50 mm (0.098 inch)	

Electrical & Mechanical Data

Characteristic Impedance	75 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	71%
Capacitance	62 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> - 110 dB
Working Voltage	1500 Vrms (Max.)
Weight	18.0 kg / km
Min. Bending Radius	6 mm (Single)

Attenuation

Frequency (MHz)	Max. Attenuation (dB/m)	(dB/ft)
1	0.05	0.015
50	0.13	0.040
100	0.20	0.061
400	0.42	0.128
700	0.59	0.180
1000	0.72	0.220

SF-141 NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.94 mm (0.037 inch)	Solid
Dielectric	PTFE	2.95 mm (0.116 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	3.58 mm (0.141 inch)	100% Coverage

Electrical & Mechanical Data

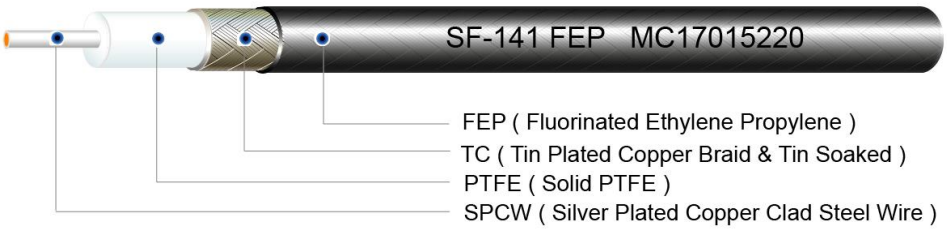
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,900 Vrms (Max.)
Weight	36.0 kg / km
Min. Bending Radius	8 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.26	0.079
1	0.39	0.119
3	0.69	0.210
5	0.95	0.290
10	1.48	0.451
15	1.97	0.600
18	2.23	0.680
20	2.30	0.701

SF-141 FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.94 mm (0.037 inch)	Solid
Dielectric	PTFE	2.95 mm (0.116 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	3.58 mm (0.141 inch)	100% Coverage
Jacket	FEP	4.10 mm (0.161 inch)	Blue, Orange, White, Red, Yellow

Electrical & Mechanical Data

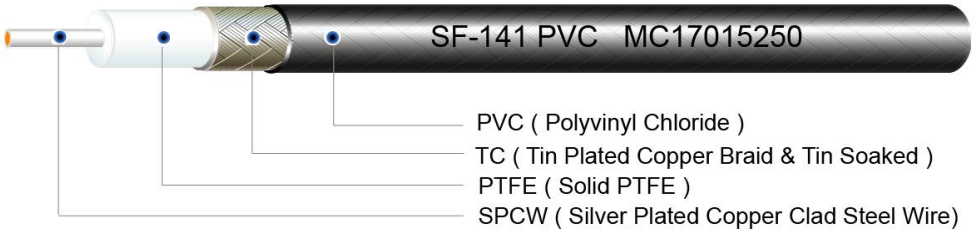
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,900 Vrms (Max.)
Weight	44.0 kg / km
Min. Bending Radius	8 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.26	0.079
1	0.39	0.119
3	0.69	0.210
5	0.95	0.290
10	1.48	0.451
15	1.97	0.600
18	2.23	0.680
20	2.30	0.701

SF-141 PVC Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPCW	0.94 mm (0.037 inch)	Solid
Dielectric	PTFE	2.95 mm (0.116 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	3.58 mm (0.141 inch)	100% Coverage
Jacket	PVC	4.60 mm (0.181 inch)	Blue, Orange, White, Red, Yellow

Electrical & Mechanical Data

Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,900 Vrms (Max.)
Weight	44.0 kg / km
Min. Bending Radius	8 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.26	0.079
1	0.39	0.119
3	0.69	0.210
5	0.95	0.290
10	1.48	0.451
15	1.97	0.600
18	2.23	0.680
20	2.30	0.701

SF-141 SPC NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	0.94 mm (0.037 inch)	Solid
Dielectric	PTFE	2.95 mm (0.116 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	3.58 mm (0.141 inch)	100% Coverage

Electrical & Mechanical Data

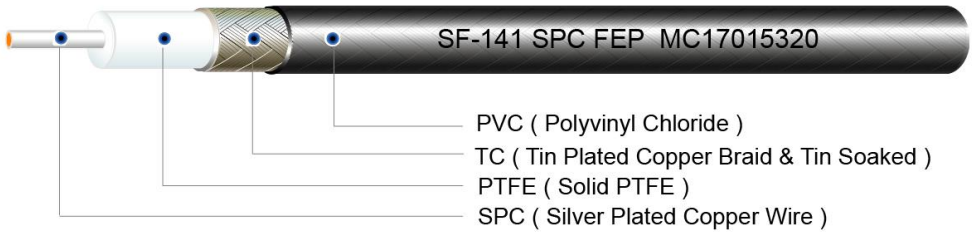
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,900 Vrms (Max.)
Weight	36.0 kg / km
Min. Bending Radius	8 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.26	0.079
1	0.39	0.119
3	0.69	0.210
5	0.95	0.290
10	1.48	0.451
15	1.97	0.600
18	2.23	0.680
20	2.30	0.701

SF-141 SPC FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	0.94 mm (0.037 inch)	Solid
Dielectric	PTFE	2.95 mm (0.116 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	3.58 mm (0.141 inch)	100% Coverage
Jacket	FEP	4.10 mm (0.161 inch)	Blue, Orange, White, Red, Yellow

Electrical & Mechanical Data

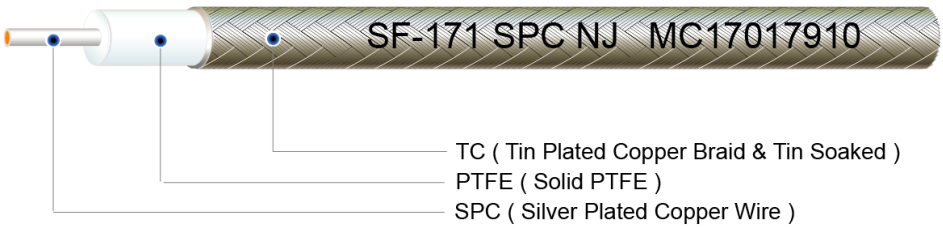
Characteristic Impedance	50 Ω
Operating Frequency	20 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	1,900 Vrms (Max.)
Weight	44.0 kg / km
Min. Bending Radius	8 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.5	0.26	0.079
1	0.39	0.119
3	0.69	0.210
5	0.95	0.290
10	1.48	0.451
15	1.97	0.600
18	2.23	0.680
20	2.30	0.701

SF-171 SPC NJ

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	1.20 mm (0.047 inch)	Solid
Dielectric	PTFE	3.80 mm (0.149 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	4.35 mm (0.171 inch)	100% Coverage

Electrical & Mechanical Data

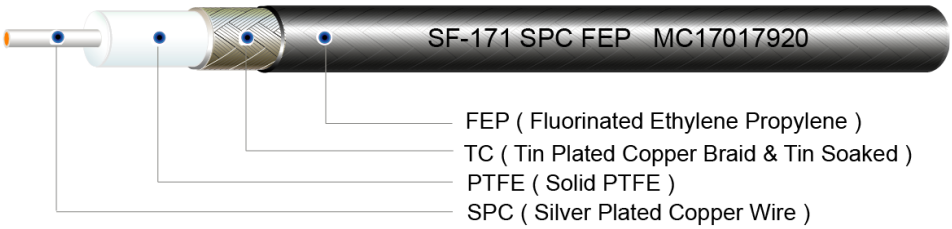
Characteristic Impedance	50 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	94 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	2,500 Vrms (Max.)
Weight	65.0 kg / km
Min. Bending Radius	20 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.4	0.20	0.061
0.9	0.30	0.091
2.0	0.44	0.134
3.0	0.59	0.180
5.0	0.79	0.241
10.0	1.20	0.366
18.0	1.72	0.524

SF-171 SPC FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	1.20 mm (0.047 inch)	Solid
Dielectric	PTFE	3.80 mm (0.149 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	4.35 mm (0.171 inch)	100% Coverage
Jacket	FEP	5.05 mm (0.199 inch)	Blue, Orange, White, Red, Yellow

Electrical & Mechanical Data

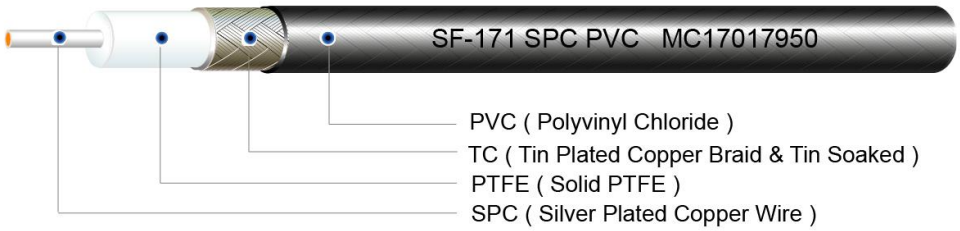
Characteristic Impedance	50 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	94 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	2,500 Vrms (Max.)
Weight	65.0 kg / km
Min. Bending Radius	20 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.4	0.20	0.061
0.9	0.30	0.091
2.0	0.44	0.134
3.0	0.59	0.180
5.0	0.79	0.241
10.0	1.20	0.366
18.0	1.72	0.524

SF-171 SPC PVC Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	1.20 mm (0.047 inch)	Solid
Dielectric	PTFE	3.80 mm (0.149 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	4.35 mm (0.171 inch)	100% Coverage
Jacket	PVC	5.05 mm (0.199 inch)	Black

Electrical & Mechanical Data

Characteristic Impedance	50 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	94 pF/m
Operating Temperature	- 40℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	2,500 Vrms (Max.)
Weight	65.0 kg / km
Min. Bending Radius	20 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.4	0.20	0.061
0.9	0.30	0.091
2.0	0.44	0.134
3.0	0.59	0.180
5.0	0.79	0.241
10.0	1.20	0.366
18.0	1.72	0.524

SF-250 SPC NJ

Hand Formable Coaxial Cable

Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	1.63 mm (0.064 inch)	Solid
Dielectric	PTFE	5.31 mm (0.209 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	6.35 mm (0.250 inch)	100% Coverage

Electrical & Mechanical Data

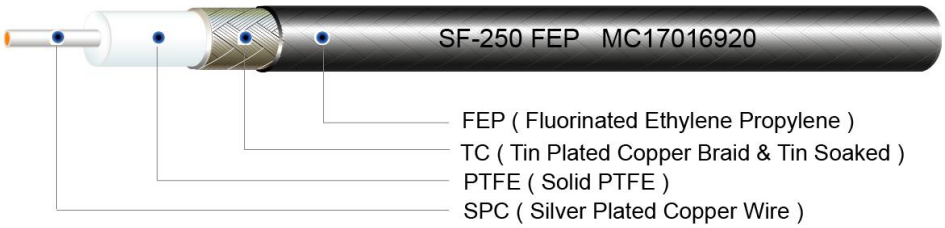
Characteristic Impedance	50 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 65℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	3500 Vrms (Max.)
Weight	114.0 kg / km
Min. Bending Radius	30 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.4	0.15	0.046
1	0.25	0.076
3	0.52	0.158
10	1.08	0.329
15	1.30	0.396
18	1.55	0.472

SF-250 SPC FEP Jacket

Hand Formable Coaxial Cable



Construction

Item	Material	Diameter	Remark
Center Conductor	SPC	1.63 mm (0.064 inch)	Solid
Dielectric	PTFE	5.31 mm (0.209 inch)	Solid
Outer Conductor	Tin Plated Copper Braid & Tin Soaked	6.35 mm (0.250 inch)	100% Coverage
Jacket	FEP	6.80 mm (0.268 inch)	Blue

Electrical & Mechanical Data

Characteristic Impedance	50 Ω
Operating Frequency	18 GHz (Max.)
Velocity of Propagation	70 %
Capacitance	96.4 pF/m
Operating Temperature	- 65℃ ~ 165℃
Shield Effectiveness	> -110 dB
Working Voltage	3500 Vrms (Max.)
Weight	130.0 kg / km
Min. Bending Radius	30 mm (Single)

Attenuation

Frequency (GHz)	Max. Attenuation (dB/m)	(dB/ft)
0.4	0.15	0.046
1	0.25	0.076
3	0.52	0.158
10	1.08	0.329
15	1.30	0.396
18	1.55	0.472

Contact Information

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URL	http://www.MIL-C-17.com
E-Mail	info@MIL-C-17.com / MHDCable@Gmail.com
CONTACT PERSION	Mr. B. G. Park (Sales Manger & CEO)