



Wire & Cable

Semi-Flex Hand Formable Microwave Coaxial Cable

- **SF 047** (0.047 in – 1.19 mm Outer Conductor Diameter).....**Page 1**
- **SF 047-FEP** (0.047 in Outer Conductor Diameter, FEP jacket)**Page 2**
- **SF 086** (0.086 in – 2.20 mm Outer Conductor Diameter).....**Page 3**
- **SF 086-FEP** (0.086 in Outer Conductor Diameter, FEP jacket)**Page 4**
- **SF 141** (0.141 in – 3.58 mm Outer Conductor Diameter).....**Page 5**
- **SF 141-FEP** (0.141 in Outer Conductor Diameter, FEP jacket)**Page 6**
- **SF 250** (0.250 in – 6.35 mm Outer Conductor Diameter).....**Page 7**
- **SF 250-FEP** (0.250 in Outer Conductor Diameter, FEP jacket)**Page 8**

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SF 047



This specification covers the requirement for SF 047, Semi-Flex hand formable coaxial cable: .047 inch diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, and tin-plated copper braid.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.31
2. Dielectric	Solid PTFE	0.94
3. Outer Conductor	Copper-tin Composite, 100% coverage	1.19

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	69.5
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.5
Operating Frequency(\leq GHz)	40

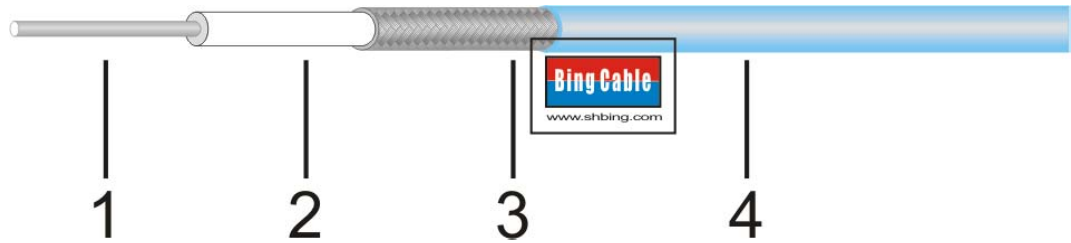
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	4
Minimum Inside Bend Radius Repeated(mm)	20
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.81	45
1.0	1.16	32
5.0	2.69	14
10.0	3.92	10
20.0	5.77	7

SF 047-FEP



This specification covers the requirement for SF 047-FEP, Semi-Flex hand formable coaxial cable: .047 inch outer conductor diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, tin-plated copper braid, and extruded FEP jacket.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.31
2. Dielectric	Solid PTFE	0.94
3. Outer Conductor	Copper-tin Composite, 100% coverage	1.19
4. Jacket	Blue FEP	1.60

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	69.5
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.5
Operating Frequency(\leq GHz)	40

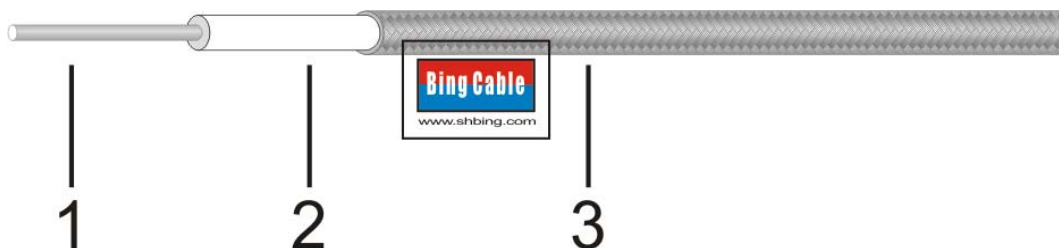
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	4
Minimum Inside Bend Radius Repeated(mm)	20
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.81	45
1.0	1.16	32
5.0	2.69	14
10.0	3.92	10
20.0	5.77	7

SF 086



This specification covers the requirement for SF 086, Semi-Flex hand formable coaxial cable: .086 inch diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, and tin-plated copper braid.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.53
2. Dielectric	Solid PTFE	1.65
3. Outer Conductor	Copper-tin Composite, 100% coverage	2.10

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.5
Operating Frequency(\leq GHz)	40

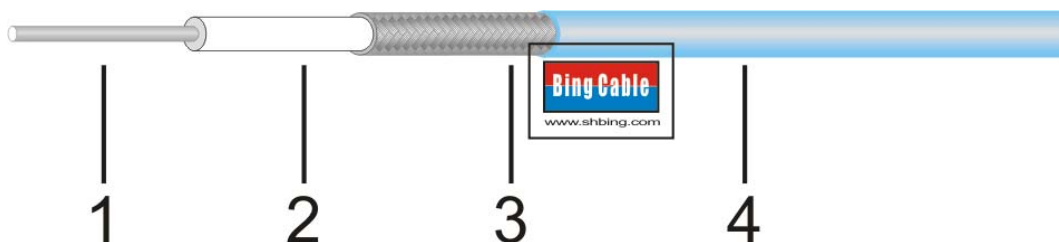
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	6
Minimum Inside Bend Radius Repeated(mm)	20
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.46	229
1.0	0.67	162
5.0	1.60	72
10.0	2.39	51
20.0	3.61	36

SF 086-FEP



This specification covers the requirement for SF 086-FEP, Semi-Flex hand formable coaxial cable: .086 inch outer conductor diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, tin-plated copper braid, and extruded FEP jacket.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.53
2. Dielectric	Solid PTFE	1.65
3. Outer Conductor	Copper-tin Composite, 100% coverage	2.10
4. Jacket	Blue FEP	2.50

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.5
Min. Screening Effectiveness up to 18GHz(dB)	40

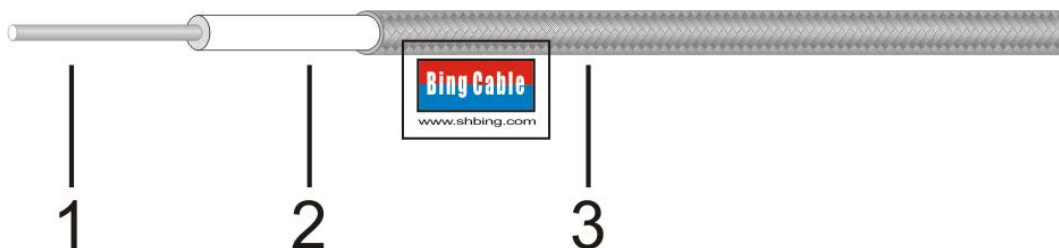
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	6
Minimum Inside Bend Radius Repeated(mm)	20
Operating Temperature Range(°C)	-65~+165

ATTENUATION & AVERAGE POWER(20°C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.46	229
1.0	0.67	162
5.0	1.60	72
10.0	2.39	51
20.0	3.61	36

SF 141 (Flexible RG402)



This specification covers the requirement for SF 141, Semi-Flex hand formable coaxial cable: .141 inch diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, and tin-plated copper braid.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.94
2. Dielectric	Solid PTFE	2.95
3. Outer Conductor	Copper-tin Composite, 100% coverage	3.58

ELECTRICAL PROPERTIES

Capacitance(pF/m)	92
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.9
Operating Frequency(\leq GHz)	33

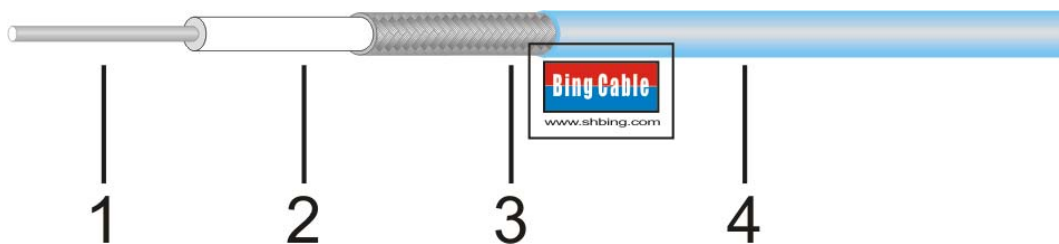
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	8
Minimum Inside Bend Radius Repeated(mm)	40
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.27	601
1.0	0.39	425
5.0	0.99	190
10.0	1.52	134
20.0	2.39	95

SF 141-FEP



This specification covers the requirement for SF 141-FEP, Semi-Flex hand formable coaxial cable: .141 inch outer conductor diameter 50 ohm coaxial cable with silver-coated copper-clad steel center conductor, solid PTFE dielectric, tin-plated copper braid, and extruded FEP jacket.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper Clad Steel	0.94
2. Dielectric	Solid PTFE	2.95
3. Outer Conductor	Copper-tin Composite, 100% coverage	3.58
4. Jacket	Blue FEP	4.10

ELECTRICAL PROPERTIES

Capacitance(pF/m)	92
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	1.9
Operating Frequency(\leq GHz)	33

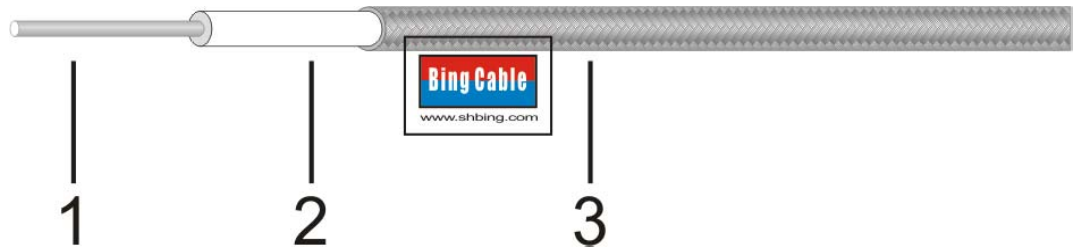
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	8
Minimum Inside Bend Radius Repeated(mm)	40
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.27	601
1.0	0.39	425
5.0	0.99	190
10.0	1.52	134
20.0	2.39	95

SF 250 (Flexible RG401)



This specification covers the requirement for SF 250, Semi-Flex hand formable coaxial cable: .250 inch diameter 50 ohm coaxial cable with silver-coated copper center conductor, solid PTFE dielectric, and tin-plated copper braid.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper	1.67
2. Dielectric	Solid PTFE	5.31
3. Outer Conductor	Copper-tin Composite, 100% coverage	6.30

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	3.5
Operating Frequency(\leq GHz)	18

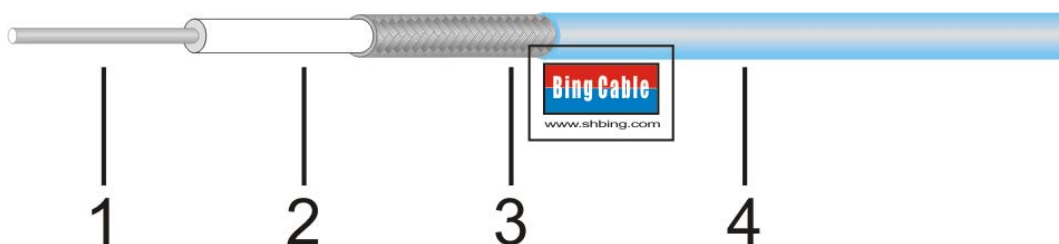
MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	30
Minimum Inside Bend Radius Repeated(mm)	120
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.16	1301
1.0	0.24	920
5.0	0.62	411
10.0	0.97	291
18.0	1.45	217

SF 250-FEP



This specification covers the requirement for SF 250-FEP, Semi-Flex hand formable coaxial cable: .250 inch outer conductor diameter 50 ohm coaxial cable with silver-coated copper center conductor, solid PTFE dielectric, tin-plated copper braid, and extruded FEP jacket.

STRUCTURE SPECIFICATION

	Material	Diameter(mm)
1. Inner Conductor	Silver Plated copper	1.67
2. Dielectric	Solid PTFE	5.31
3. Outer Conductor	Copper-tin Composite, 100% coverage	6.30
4. Jacket	Blue FEP	6.80

ELECTRICAL PROPERTIES

Capacitance(pF/m)	95
Impedance(ohm)	50
Velocity of Propagation(%)	70
Time Delay(ns/m)	4.7
Max. Operating Voltage(kVrms)	3.5
Operating Frequency(\leq GHz)	18

MECHANICAL PROPERTIES

Minimum Inside Bend Radius(mm)	30
Minimum Inside Bend Radius Repeated(mm)	120
Operating Temperature Range($^{\circ}$ C)	-65~+165

ATTENUATION & AVERAGE POWER(20 $^{\circ}$ C & SEA LEVEL)

Frequency(GHz)	Max. Attenuation(dB/m)	Power (watts)
0.5	0.16	1301
1.0	0.24	920
5.0	0.62	411
10.0	0.97	291
18.0	1.45	217