



Product Selection Guide

Bulk RF Cable

LMR Series

Features

- Low loss
- Excellent shielding performance
- Excellent durability and flexibility



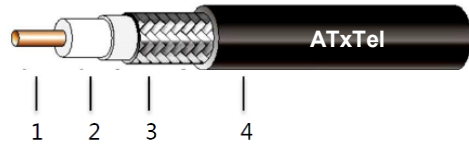
Model	Outer Diameter (mm)	Operating Frequency (GHz)	Impedance (Ohms)	Velocity	Operating Voltage (Vrms)	Capacitance (pF/m)	Attenuation(dB/m, Typical Value @25°C & VSWR=1.0)					
							450MHz	900MHz	1800MHz	3000MHz	5000MHz	6000MHz
LMR195	4.95	6	50	75%	3000	80	0.26	0.36	0.52	0.69	0.90	0.99
LMR240	6.10	6	50	83%	5000	80	0.17	0.25	0.36	0.49	0.66	0.74
LMR300	7.62	6	50	83%	5000	80	0.13	0.19	0.28	0.37	0.51	0.56
LMR400	10.29	6	50	85%	8000	78	0.09	0.13	0.18	0.25	0.33	0.36
LMR600	14.99	6	50	87%	8000	76	0.06	0.08	0.12	0.16	0.22	0.25

Product Specifications



Model: LMR195

Low Loss Coaxial Cable



Construction	Materials	Outer Diameter (mm)
1. Inner Conductor	Copper Wire	0.94
2. Dielectric	Foam Polyethylene	2.97
3. Outer Conductor	Aluminum + Tinned Copper	3.50
4. Jacket	Black Polyethylene	4.95

Electrical Specifications

Cable Impedance	50 Ω
Capacitance	80 pF/m
Shielding Effectiveness	>90dB
Velocity	75%
Jacket Spark Test Voltage	3000 Vrms
Peak Power	2.5 kW
Operating Frequency	30-6000 MHz max

Mechanical & Environmental Specifications

Bend Radius	12.7 mm
Temperature Range	-40 ~ +85 $^{\circ}\text{C}$
RoHS Compliance	Compliant
Tensile Strength	18 kg

Attenuation (Typical Value @ 25 $^{\circ}\text{C}$ & Sea Level)

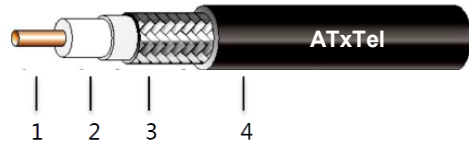
Frequency (MHz)	Attenuation (dB/m)
150	0.14
450	0.26
900	0.36
1800	0.52
3000	0.69
5000	0.90
6000	0.99

Product Specifications



Model: LMR240

Low Loss Coaxial Cable



Construction	Materials	Outer Diameter (mm)
1. Inner Conductor	Copper Wire	1.42
2. Dielectric	Foam Polyethylene	3.81
3. Outer Conductor	Aluminum + Tinned Copper	4.52
4. Jacket	Black Polyethylene	6.10

Electrical Specifications

Cable Impedance	50 Ω
Capacitance	80 pF/m
Shielding Effectiveness	>90dB
Velocity	83%
Jacket Spark Test Voltage	5000 Vrms
Peak Power	5.6 kW
Operating Frequency	30-6000 MHz

Mechanical & Environmental Specifications

Bend Radius	19.1 mm
Temperature Range	-40 ~ +85 $^{\circ}\text{C}$
RoHS Compliance	Compliant
Tensile Strength	36 kg

Attenuation (Typical Value @ 25 $^{\circ}\text{C}$ & Sea Level)

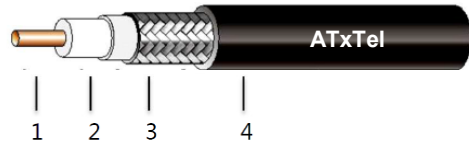
Frequency (MHz)	Attenuation (dB/m)
150	0.10
450	0.17
900	0.25
1800	0.36
3000	0.49
5000	0.66
6000	0.74

Product Specifications



Model: LMR300

Low Loss Coaxial Cable



Construction	Materials	Outer Diameter (mm)
1. Inner Conductor	Copper Wire	1.78
2. Dielectric	Foam Polyethylene	4.83
3. Outer Conductor	Aluminum + Tinned Copper	5.66
4. Jacket	Black Polyethylene	7.62

Electrical Specifications

Cable Impedance	50 Ω
Capacitance	80 pF/m
Shielding Effectiveness	>90dB
Velocity	83%
Jacket Spark Test Voltage	5000 Vrms
Peak Power	10.0 kW
Operating Frequency	30-6000 MHz

Mechanical & Environmental Specifications

Bend Radius	22.2 mm
Temperature Range	-40 ~ +85 $^{\circ}\text{C}$
RoHS Compliance	Compliant
Tensile Strength	55 kg

Attenuation (Typical Value @ 25 $^{\circ}\text{C}$ & Sea Level)

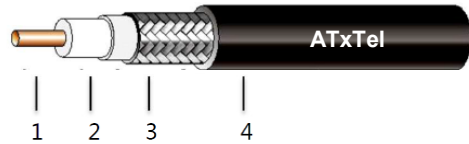
Frequency (MHz)	Attenuation (dB/m)
50	0.05
450	0.13
900	0.19
1800	0.28
3000	0.37
5000	0.51
6000	0.56

Product Specifications



Model: LMR400

Low Loss Coaxial Cable



Construction	Materials	Outer Diameter (mm)
1. Inner Conductor	Copper Wire	2.74
2. Dielectric	Foam Polyethylene	7.24
3. Outer Conductor	Aluminum + Tinned Copper	8.08
4. Jacket	Black Polyethylene	10.29

Electrical Specifications

Cable Impedance	50 Ω
Capacitance	78 pF/m
Shielding Effectiveness	>90dB
Velocity	85%
Jacket Spark Test Voltage	8000 Vrms
Peak Power	16.0 kW
Operating Frequency	30-6000 MHz

Mechanical & Environmental Specifications

Bend Radius	25.4 mm
Temperature Range	-40 ~ +85 $^{\circ}\text{C}$
RoHS Compliance	Compliant
Tensile Strength	73 kg

Attenuation (Typical Value @ 25 $^{\circ}\text{C}$ & Sea Level)

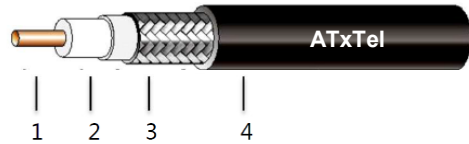
Frequency (MHz)	Attenuation (dB/m)
150	0.05
450	0.09
900	0.13
1800	0.18
3000	0.25
5000	0.33
6000	0.36

Product Specifications



Model: LMR400

Low Loss Coaxial Cable



Construction	Materials	Outer Diameter (mm)
1. Inner Conductor	Copper Wire	2.74
2. Dielectric	Foam Polyethylene	7.24
3. Outer Conductor	Aluminum + Tinned Copper	8.08
4. Jacket	Black Polyethylene	10.29

Electrical Specifications

Cable Impedance	50 Ω
Capacitance	78 pF/m
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Velocity	85%
Jacket Spark Test Voltage	8000 Vrms
Peak Power	16.0 kW
Operating Frequency	30-6000 MHz

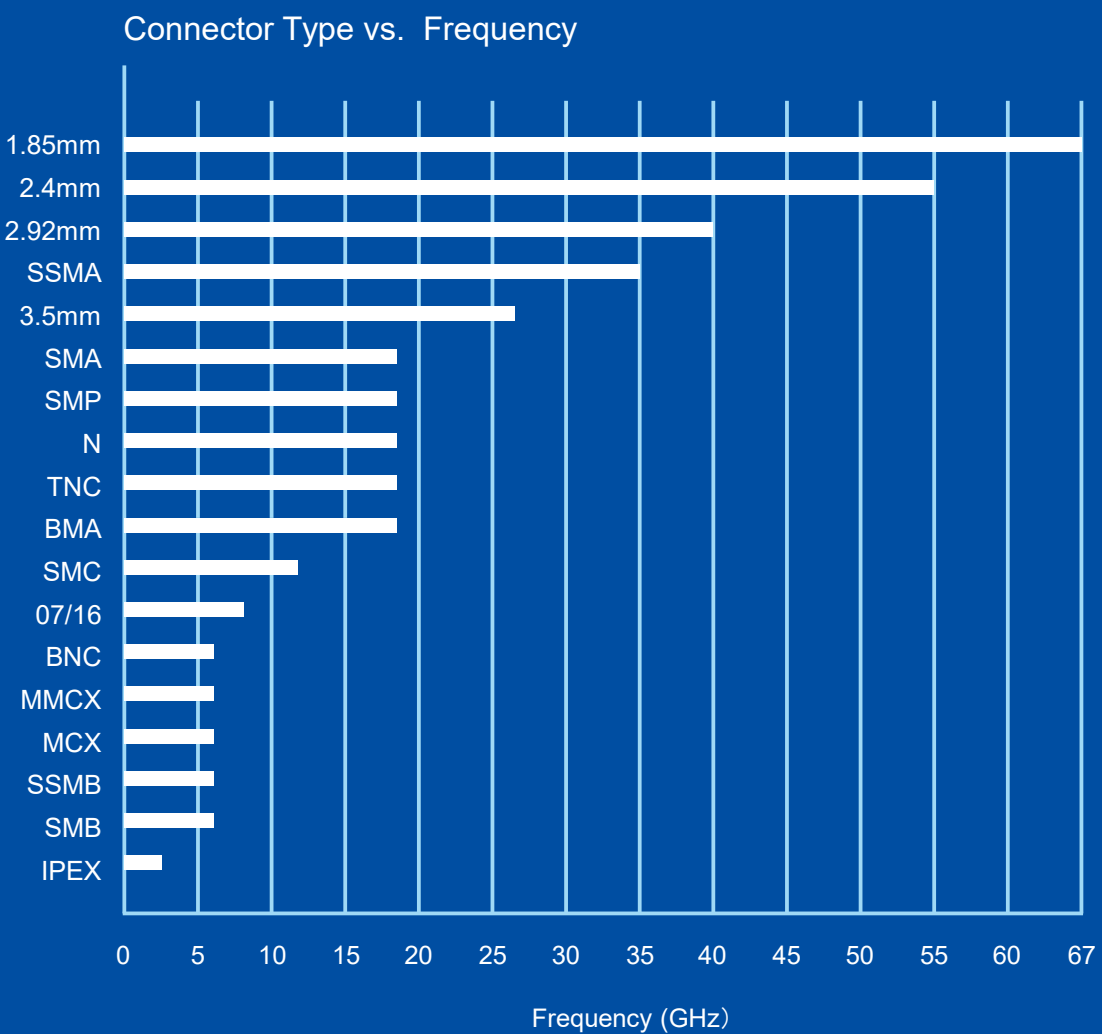
Mechanical & Environmental Specifications

Bend Radius	25.4 mm
Temperature Range	-40 ~ +85 $^{\circ}\text{C}$
RoHS Compliance	Compliant
Tensile Strength	73 kg

Attenuation (Typical Value @ 25 $^{\circ}\text{C}$ & Sea Level)

Frequency (MHz)	Attenuation (dB/m)
150	0.05
450	0.09
900	0.13
1800	0.18
3000	0.25
5000	0.33
6000	0.36

Reference



Frequently used information

Insulation Material Characteristics

Material	Dielectric constant	Capacitance	Temperature(°C)
PTFE	2.07	95.9	-75 to +250
Polyethylene	2.3	101.1	-65 to +80
Foam Polyethylene	1.29-1.64	75.72 - 85.38	-65 to +100
Polyvinylchloride	3.0-8.0	115.47 - 188.56	-50 to +105
Polyamide	3.5-4.6	124.72 - 254.73	-60 to +120
Silicone Rubber	2.1-3.5	99.61 - 124.72	-70 to +250
Ethylene Propylene	2.24	99.8	-40 to +105
FEP	2.1	96.6	-70 to +200
Low Density PTFE	1.38-1.73	78.3 - 87.7	-75 to +250
Foam FEP	1.45	80.3	-75 to +200
Polyimide	3.0-3.5	115.5 - 124.7	-75 to +300
PFA	2.1	96.6	-75 to +260
ETFE	2.6	107.5	-75 to +150
ECTFE	2.5	105.4	-65 to +150
PVDF	7.8	186.2	-75 to +125
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Cable outer jacket material working temperature

Material Name	Working temperature (°C)
PTFE	-75 to +250
FEP	-70 to +200
Silicone Rubber	-70 to +200
ETFE	-65 to +150
Nylon	-40 to +105
PUR	-55 to +85
PVC	-50 to +85
PE	-65 to +80
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