

Product Specifications

EMR-400

50 Ohm Braided Coaxial Cable, variable, black PE jacket



Construction Materials

Jacket Color	Black
Jacket Material	Non-halogenated PE
Braid Material	Tinned copper
Shield Tape Material	Aluminum
Dielectric Material	Foam PE
Inner Conductor Material	Copper-clad aluminum wire

Dimensions

Cable Weight	0.10 kg/m
Diameter Over Dielectric	7.240 mm 0.285 in
Diameter Over Jacket	10.290 mm 0.405 in
Inner Conductor OD	2.7400 mm 0.1079 in
Nominal Size	0.400 in
Outer Conductor OD	8.080 mm 0.318 in

Electrical Specifications

Cable Impedance	50 ohm
Capacitance	78.0 pF/m 24.0 pF/ft
dc Resistance, Inner Conductor	4.490 ohms/km 1.370 ohms/kft
dc Resistance, Outer Conductor	5.610 ohms/km 1.710 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	8000 V
Maximum Frequency	16.20 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16.0 kW
Shielding Effectiveness	>90 dB
Velocity	85%

Environmental Specifications

Installation Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

Product Specifications

General Specifications

Cable Type	EMR-400
Braid Coverage	86% braid
Brand	ECore

Mechanical Specifications

Bending Moment	0.7 N-m 0.5 ft lb
Flat Plate Crush Strength	0.7 kg/mm 40.0 lb/in
Minimum Bend Radius, Single Bend	25.40 mm 1.00 in
Tensile Strength	73 kg 160 lb

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
100–520 MHz	1.14	23.69

Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30 MHz	2.49	0.76
50 MHz	3.18	0.97
150 MHz	4.92	1.50
220 MHz	6.23	1.90
450 MHz	8.86	2.70
900 MHz	12.80	3.90
1500 MHz	16.70	5.10
1800 MHz	18.40	5.60
2000 MHz	19.40	5.90
2400 MHz	21.65	6.60
2500 MHz	22.00	6.70
3000 MHz	24.60	7.50
4000 MHz	28.87	8.80
4500 MHz	30.84	9.40
5000 MHz	32.81	10.00
5200 MHz	33.46	10.20
5500 MHz	34.78	10.60
5800 MHz	35.76	10.90
6000 MHz	36.42	11.10

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant
China RoHS SJ/T 11364-2006	Below Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

