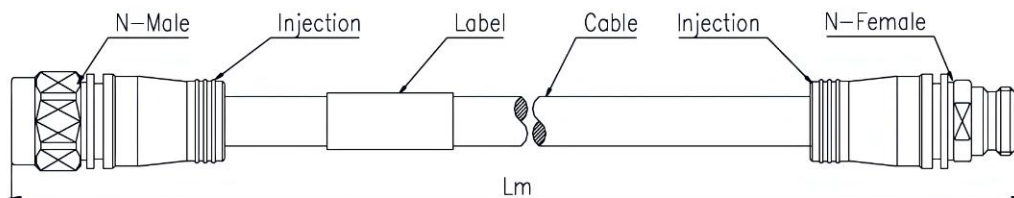




RF cable assembly, 1/4 in super-flexible coaxial cable with FRNC jacket, N male to N female.



General Specifications

Flexibility	Super-flexible
Jacket Color	Black
Performance Note	Attenuation guaranteed within the tolerance $\pm 10\%$
Structure Note	Dimension guaranteed within the tolerance $\pm 1\%$
Nominal Cable Size	1/4 in
Connector 1	N male
Connector 2	N female
Frequency Band	DC - 4 GHz
Insertion Loss	Cable loss + Connector loss ($0.1 \cdot \sqrt{FGHz}$)
Return Loss	$\leq -28\text{dB}$ @DC-1GHz $\leq -26\text{dB}$ @1.0-2.2GHz $\leq -23\text{dB}$ @2.2-3.0GHz $\leq -22\text{dB}$ @3.0-3.8GHz
PIM (900MHz, 3rd Order)	$\leq -160\text{dBc}$ @ $2 \times 43\text{dBm}$
Impedance	50 ohms ± 1 ohm

Cable Specifications

Maximum Available Frequency	20.4 GHz
Cut-off Frequency	25 GHz
Velocity Ratio	82%
Peak Power	8.2 kW
Insulation Resistance	3000 MΩ·km
DC Breakdown Voltage	1600 V
Nominal Capacitance	80 pF/m
Nominal Inductance	0.195 μH/m

Cable Material

Inner Conductor	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene
Outer Conductor	Helical Corrugated Copper Tube
Jacket	Black PE

Attenuations

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.40	0.12	6.40
1	0.57	0.17	6.40
1.5	0.70	0.21	6.40
2	0.81	0.25	6.40
10	1.81	0.55	3.97
20	2.57	0.78	2.80
30	3.16	0.96	2.28
50	4.10	1.25	1.76
88	5.15	1.57	1.32
100	5.52	1.68	1.13
108	6.07	1.85	1.01
150	7.18	2.19	1.00
174	7.74	2.36	0.93
200	8.33	2.54	0.87
300	10.31	3.14	0.70

400	11.98	3.65	0.60
450	12.21	3.72	0.52
500	13.37	4.08	0.51
512	13.56	4.13	0.50
600	14.75	4.50	0.45
700	16.04	4.89	0.45
800	17.23	5.25	0.42
824	17.43	5.31	0.41
900	17.76	5.41	0.37
960	18.91	5.76	0.37
1000	19.41	5.92	0.37
1250	21.78	6.64	0.30
1500	24.06	7.33	0.28
1700	25.74	7.85	0.28
1800	26.08	7.95	0.25
2000	28.22	8.60	0.25
2100	28.91	8.81	0.24
2200	29.70	9.05	0.24
2400	31.42	9.58	0.21
3000	34.89	10.63	0.19
4000	41.39	12.62	0.17
6000	52.18	15.90	0.14
8000	61.78	18.83	0.12

Return Loss / VSWR

Frequency Band	VSWR	Return Loss (dB)	Tolerance
DC-1.0GHz	1.08	28.3	5%
1.0-2.2GHz	1.12	24.9	5%
2.2-3.0GHz	1.15	23.1	5%
3.0-3.8GHz	1.17	22.1	5%

Mechanical Specifications

Bend Protection	Molding
Label	Wrap Sticker
Bending Radius (Single)	≥12 mm
Bending Radius (Repeated)	≥25 mm
Number of Bending (Typical)	≤9
Tensile Strength	680N
Connector Tightening Torque	≤30N.m for 7/16 DIN Type ≤8N.m for 4.3-10 Type ≤8N.m for mini-DIN Type ≤1.5N.m for N Type ≤1.8N.m for NEX10 Type
Unit Packing	1pcs in PE bag
Package Packing	Quality Carton

Environmental Specifications

Installation Temperature	-20 °C to +55 °C
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-45 °C to +85 °C
Relative Humidity	5% - 95%
IP Rating	Mated IP68, 1m, 1.5hrs, 20 deg-C

Regulatory Compliances

ISO 9001:2015	Compliant
ROHS	Compliant
China RoHS	Compliant
UK RoHS	Compliant
REACH	Compliant
EU/CE	Compliant

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