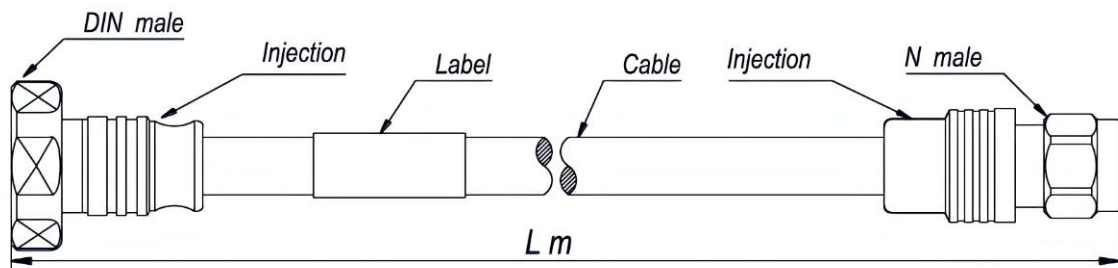




RF cable assembly, 1/2 in super-flexible coaxial cable with LSZH jacket, 7/16 DIN male to N male.



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	1/2 in
Connector 1	7/16 DIN male
Connector 2	N male
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	10.2 GHz
Cut-off Frequency	13 GHz
Velocity Ratio	81%
Peak Power	16 kW
Insulation Resistance	5000 MΩ·km
DC Breakdown Voltage	2500 V
Nominal Capacitance	83 pF/m
Nominal Inductance	0.19 μH/m

Cable Material

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

Attenuations

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.23	0.07	15.6
1	0.32	0.10	15.6
1.5	0.40	0.12	15.6
2	0.46	0.14	15.6
10	1.03	0.31	10.1
20	1.48	0.45	7.07
30	1.81	0.55	5.75
50	2.36	0.72	4.42
88	3.16	0.96	3.30
100	3.38	1.03	3.08
108	3.51	1.07	2.96
150	4.17	1.27	2.49
174	4.51	1.37	2.30
200	4.86	1.48	2.14
300	6.03	1.84	1.72

400	7.05	2.15	1.48
450	7.48	2.28	1.38
500	7.96	2.43	1.31
512	8.07	2.46	1.29
600	8.80	2.68	1.18
700	9.58	2.92	1.09
800	10.30	3.14	1.01
824	10.50	3.20	0.99
900	11.09	3.38	0.91
960	11.49	3.50	0.90
1000	11.68	3.56	0.88
1250	13.27	4.04	0.78
1500	14.75	4.50	0.70
1700	15.84	4.83	0.65
1800	16.44	5.01	0.63
2000	17.43	5.31	0.59
2100	17.92	5.46	0.58
2200	18.42	5.61	0.56
2400	18.71	5.70	0.55
3000	22.28	6.79	0.42
4000	26.44	8.06	0.39
6000	34.06	10.38	0.30
8000	40.99	12.49	0.25

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)	≥17 mm
Bending Radius (Repeated)	≥35 mm
Number of Bending (Typical)	≤20
Tensile Strength	1050 N
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	-20 °C to +85 °C
Storage Temperature	-25 °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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