

**RFA 7/8" L A LIGHT COAXIAL COPPER CABLE**

	Material code
RFA 7/8" -50 L	60016686
RFA 7/8" -50 L BHF	60016692
RFA 7/8" -50 L BHF (UL) CATVR	

**CONSTRUCTION**


Inner conductor	Copper tube	Ø 9.0 mm	(0.35 in)
Dielectric	Cellular polyethylene	Ø 22.2 mm	(0.87 in)
Outer conductor	Corrugated copper tube	Ø 24.9 mm	(0.98 in)
Jacket	See Jacketing Options table below	Ø 27.5 mm	(1.08 in)
Marking	Draka, cable type, CPR class, manufacture week/year, batch number and meter mark		

**ELECTRICAL CHARACTERISTICS at +20°C (+68°F)**

Characteristic impedance	50 ± 1 Ω
Min. Return loss with delivery lengths	
790 – 960 MHz	20 dB
1710 – 1880 MHz	20 dB
1900 – 2170 MHz	20 dB
2490 – 2700 MHz	20 dB
3400 – 3800 MHz	20 dB
Other bands also available on request	
RL typically 24 dB for 100 m cable with NKC connectors	
Attenuation	See table
Velocity factor	0.88
Capacitance	76.0 pF/m (23 pF/ft)
Inductance	0.190 µH/m (0.945 µH/ft)
Maximum frequency	5100 MHz
Max power rating	See table
Peak RF voltage rating	3.1 kV
Peak power rating	95 kW
DC-resistance	
Inner conductor	2.02 Ω/km (0.62 Ω/1000 ft)
Outer conductor	1.51 Ω/km (0.46 Ω/1000 ft)

**MECHANICAL CHARACTERISTICS**

Weight (polyethylene jacket)	0.42 kg/m	(0.28 lb/ft)
Weight (BHF fire retardant jacket)	0.46 kg/m	(0.31 lb/ft)
Maximum pulling force	2000 N	(450 lb)
Minimum bending radius		
Single bending	120 mm	(5 in)
Repeated bending	240 mm	(9 in)
Operating temperature range	-55...+85°C	(-67...+185°F)
Crush resistance	1.45 kg/mm	(81 lb/in)
Bending moment	13 Nm	(10 lb-ft)
Recommended clamp spacing	1.0 m	(3.3 ft)

## JACKETING OPTIONS

TYPE	JACKET	IEC 60754 -1/-2 Halogen free, non corrosive	IEC 61034 low smoke emission	IEC 60332-3-24 fire retardant	UL Rated	UV retardancy	Min. installation temperature
RFA 7/8"-50 L	Black, halogen free polyethylene	yes	no	no	no	yes	-40°C (-40°F)
RFA 7/8"-50 L BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	no	yes	-20°C (-4°F)
RFA 7/8"-50 L BHF (UL) CATVR	Black, halogen free fire retardant thermoplastic, UL Riser rated jacket	yes	yes	yes	yes	yes	-20°C (-4°F)

## CONNECTOR CODES

NKC1078300 N male  
 NKC1078400 N female  
 NKC1078100 7/16 male  
 NKC1078200 7/16 female  
 NKC1078500 7/16 male Right angle  
 NKC1078700 4.3/10 female  
 NKC1078P00 4.3/10 male (screw)  
 NKC1078290 7/16 Bulkhead female

## ACCESSORIES & TOOLS & INSTALLATION

Knife and hacksaw can be used as connector installation tools.

Please contact your salesperson if any further questions.

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FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW	FREQUENCY MHz	ATTENUATION dB/100 m	POWER RATING kW
0.5	0.080	95	900	3.7	2.47
1.0	0.113	83	925	3.8	2.43
1.5	0.138	68	950	3.8	2.40
1.85	0.153	61	960	3.9	2.38
2.0	0.160	59	1000	4.0	2.33
3.7	0.217	43	1250	4.5	2.06
5.3	0.261	35.9	1400	4.8	1.93
7.1	0.302	30.9	1500	5.0	1.86
10	0.36	26.0	1575	5.1	1.81
14	0.43	21.9	1700	5.3	1.73
18	0.48	19.3	1800	5.5	1.68
20	0.51	18.3	1900	5.7	1.62
25	0.57	16.3	2000	5.8	1.58
28	0.61	15.4	2100	6.0	1.53
30	0.63	14.8	2200	6.2	1.49
50	0.81	11.4	2400	6.5	1.41
70	0.97	9.6	2500	6.6	1.38
75	1.00	9.3	2600	6.8	1.35
88	1.09	8.5	2700	6.9	1.32
100	1.16	8.0	2800	7.1	1.29
108	1.21	7.7	3000	7.4	1.24
144	1.41	6.6	3400	7.9	1.15
150	1.44	6.5	3500	8.1	1.14
174	1.55	6.0	3600	8.2	1.12
200	1.67	5.6	3700	8.3	1.10
220	1.76	5.3	3800	8.5	1.08
300	2.07	4.5	4000	9	1.05
380	2.34	4.0	4900	10	0.93
400	2.41	3.9	5000	10	0.92
432	2.51	3.7	5100	10	0.91
450	2.57	3.61			
500	2.71	3.42			
512	2.75	3.37			
600	2.99	3.08			
700	3.26	2.83			
750	3.38	2.73			
800	3.50	2.63			
824	3.56	2.59			
870	3.67	2.52			
890	3.71	2.48			
894	3.72	2.48			

Attenuation at imperial scale can be calculated: [dB / 100 m] \* 0.3048 = [dB / 100 ft].

Attenuation values are typical at ambient temperature +20°C (+68°F).

Power rating ambient temperature +40°C (+104°F), inner conductor +100°C (+212°F).

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