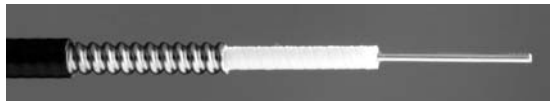
CELLFLEX® Cable

SCF14-50 Series
1/4" Superflexible Foam Coax



APPLICATIONS

OEM jumpers, BTS inter-cabinet connections, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Superflexible
Size	1/4"
STRUCTURE	
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	1.9 (0.075)
Diameter Dielectric, mm (in)	4.3 (0.170)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	6.5 (0.26)
Diameter over Jacket Nominal, mm (in)	7.8 (0.31)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.07 (0.05)
Minimum Bending Radius, Repeated Bends, mm (in)	25 (1.0)
Bending Moment, N•m (lb-ft)	0.7 (0.5)
Flat Plate Crush Strength, N/mm (lb/in)	18.4 (100)
Tensile Strength, N (lb)	600 (135)
Recommended / Maximum Clamp Spacing, m (ft)	0.20 / 0.20 (0.67 / 0.67)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	82
Capacitance, pF/m (pF/ft)	82.0 (25.0)
Inductance, µH/m (µH/ft)	0.207 (0.063)
Maximum Frequency, GHz	20.4
Peak Power Rating, kW	5.5
RF Peak Voltage, volts	740
Jacket Spark, volt RMS	5000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	10.40 (3.17)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	6.60 (2.01)

See Installation, Operation and Storage Temperatures on page 16.

SCF14-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.401	0.122	5.50
1	0.568	0.173	5.50
1.5	0.696	0.212	5.50
2	0.804	0.245	5.50
10	1.81	0.550	3.66
20	2.56	0.781	2.58
30	3.15	0.960	2.10
50	4.08	1.24	1.62
88	5.45	1.66	1.21
100	5.82	1.77	1.14
108	6.06	1.85	1.09
150	7.17	2.19	0.922
174	7.75	2.36	0.854
200	8.33	2.54	0.794
300	10.3	3.13	0.643
400	12.0	3.65	0.553
450	12.7	3.88	0.519
500	13.5	4.10	0.491
512	13.6	4.15	0.485
600	14.8	4.52	0.446
700	16.1	4.91	0.411
800	17.3	5.27	0.382
824	17.6	5.35	0.376
894	18.4	5.60	0.360
900	18.4	5.62	0.359
925	18.7	5.70	0.354
960	19.1	5.81	0.347
1000	19.5	5.94	0.339
1250	22.0	6.71	0.300
1500	24.3	7.41	0.272
1700	26.1	7.94	0.254
1800	26.9	8.20	0.246
2000	28.5	8.69	0.232
2100	29.3	8.93	0.226
2200	30.1	9.17	0.220
2400	31.6	9.62	0.209
3000	35.8	10.9	0.185
3500	39.1	11.9	0.169
4000	42.2	12.9	0.157
5000	48.0	14.6	0.138
6000	53.4	16.3	0.124
7000	58.6	17.9	0.113
8000	63.4	19.3	0.104
9000	68.1	20.8	0.097
10000	72.6	22.1	0.091
12000	81.2	24.8	0.081
14000	89.4	27.2	0.074
16000	97.2	29.6	0.068
18000	104.7	31.9	0.063
20000	112	34.2	0.059
20400	113	34.6	0.058

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

CONNECTORS AND ACCESSORIES

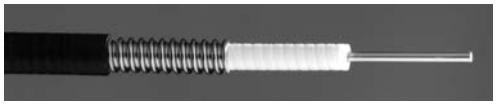
ORDERING INFORMATION

Model Number	Jacket
SCF14-50J	Standard
SCF14-50JFN	Flame Retardant

Phase stabilized versions available upon request.

CELLFLEX® Cable

SCF38-50 Series
3/8" Superflexible Foam Coax



APPLICATIONS

OEM jumpers, BTS inter-cabinet connections, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Superflexible
Size	3/8"
STRUCTURE	
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	2.6 (0.1)
Diameter Dielectric, mm (in)	6.3 (0.25)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	9.1 (0.36)
Diameter over Jacket Nominal, mm (in)	10.2 (0.4)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.12 (0.08)
Minimum Bending Radius, Repeated Bends, mm (in)	25 (1.0)
Bending Moment, N•m (lb-ft)	1.4 (1.0)
Flat Plate Crush Strength, N/mm (lb/in)	18.4 (100)
Tensile Strength, N (lb)	600 (135)
Recommended / Maximum Clamp Spacing, m (ft)	0.25 / 0.25 (0.80 / 0.80)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	82
Capacitance, pF/m (pF/ft)	82.0 (25.0)
Inductance, µH/m (µH/ft)	0.207 (0.063)
Maximum Frequency, GHz	13.4
Peak Power Rating, kW	11.9
RF Peak Voltage, volts	1090
Jacket Spark, volt RMS	5000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	5.3 (1.62)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	5.6 (1.71)

See Installation, Operation and Storage Temperatures on page 16.

SCF38-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.291	0.089	11.9
1	0.412	0.126	11.9
1.5	0.505	0.154	11.9
2	0.584	0.178	11.9
10	1.31	0.400	6.02
20	1.86	0.567	4.24
30	2.28	0.696	3.46
50	2.96	0.903	2.67
88	3.95	1.20	2.00
100	4.22	1.29	1.87
108	4.39	1.34	1.80
150	5.20	1.58	1.52
174	5.61	1.71	1.41
200	6.03	1.84	1.31
300	7.45	2.27	1.06
400	8.66	2.64	0.912
450	9.22	2.81	0.857
500	9.74	2.97	0.810
512	9.87	3.01	0.800
600	10.7	3.27	0.736
700	11.6	3.55	0.678
800	12.5	3.81	0.631
824	12.7	3.87	0.621
894	13.3	4.05	0.595
900	13.3	4.06	0.593
925	13.5	4.12	0.584
960	13.8	4.20	0.572
1000	14.1	4.30	0.560
1250	15.9	4.85	0.496
1500	17.6	5.36	0.449
1700	18.8	5.74	0.420
1800	19.4	5.92	0.407
2000	20.6	6.27	0.384
2100	21.1	6.45	0.373
2200	21.7	6.61	0.364
2400	22.8	6.94	0.347
3000	25.8	7.87	0.306
3500	28.2	8.59	0.280
4000	30.4	9.27	0.260
5000	34.6	10.5	0.228
6000	38.4	11.7	0.205
7000	42.1	12.8	0.188
8000	45.6	13.9	0.173
9000	48.9	14.9	0.161
10000	52.1	15.9	0.152
12000	58.2	17.7	0.136
13400	62.3	19.0	0.127

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

CONNECTORS AND ACCESSORIES	
Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831

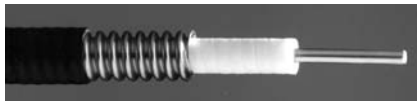
ORDERING INFORMATION

Model Number	Jacket
SCF38-50J	Standard
SCF38-50JFN	Flame Retardant
SCF38-50JGR	Standard, Gray

Phase stabilized versions available upon request.

CELLFLEX® Cable

SCF12-50 Series
1/2" Superflexible Foam Coax



APPLICATIONS

OEM jumpers, Main feed transitions to equipment, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Superflexible
Size	1/2"
STRUCTURE	
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	3.6 (0.14)
Diameter Dielectric, mm (in)	8.3 (0.33)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	12.3 (0.48)
Diameter over Jacket Nominal, mm (in)	13.7 (0.54)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.21 (0.14)
Minimum Bending Radius, Repeated Bends, mm (in)	32 (1.25)
Bending Moment, N•m (lb-ft)	1.8 (1.3)
Flat Plate Crush Strength, N/mm (lb/in)	20.4 (110)
Tensile Strength, N (lb)	650 (146)
Recommended / Maximum Clamp Spacing, m (ft)	0.30 / 0.30 (1.00 / 1.00)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	82
Capacitance, pF/m (pF/ft)	82.0 (25.0)
Inductance, µH/m (µH/ft)	0.207 (0.063)
Maximum Frequency, GHz	11.7
Peak Power Rating, kW	20.5
RF Peak Voltage, volts	1430
Jacket Spark, volt RMS	5000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	2.9 (0.88)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	3.4 (1.04)

See Installation, Operation and Storage Temperatures on page 16.

SCF12-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.229	0.070	20.5
1	0.324	0.099	20.5
1.5	0.397	0.121	20.5
2	0.458	0.140	18.8
10	1.03	0.314	8.37
20	1.46	0.446	5.90
30	1.80	0.548	4.80
50	2.33	0.710	3.70
88	3.11	0.949	2.77
100	3.33	1.01	2.59
108	3.46	1.05	2.49
150	4.10	1.25	2.10
174	4.43	1.35	1.95
200	4.76	1.45	1.81
300	5.89	1.79	1.47
400	6.85	2.09	1.26
450	7.29	2.22	1.18
500	7.71	2.35	1.12
512	7.81	2.38	1.10
600	8.50	2.59	1.01
700	9.23	2.81	0.934
800	9.92	3.02	0.869
824	10.1	3.07	0.855
894	10.5	3.21	0.818
900	10.6	3.22	0.816
925	10.7	3.27	0.803
960	11.0	3.34	0.787
1000	11.2	3.41	0.770
1250	12.7	3.86	0.682
1500	14.0	4.26	0.616
1700	15.0	4.57	0.575
1800	15.5	4.72	0.557
2000	16.4	5.01	0.525
2100	16.9	5.15	0.511
2200	17.3	5.28	0.498
2400	18.2	5.55	0.474
3000	20.7	6.30	0.417
3500	22.6	6.88	0.382
4000	24.4	7.44	0.353
5000	27.8	8.48	0.310
6000	31.0	9.44	0.278
7000	34.0	10.4	0.254
8000	36.8	11.2	0.234
9000	39.6	12.1	0.218
10000	42.3	12.9	0.204
11700	46.6	14.2	0.185

Standard Conditions:
For attenuation: VSWR 1.0, ambient temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

CONNECTORS AND ACCESSORIES	
Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

ORDERING INFORMATION

Model Number	Jacket
SCF12-50J	Standard
SCF12-50JFN	Flame Retardant
SCF12-50JGR	Standard, Gray

Phase stabilized versions available upon request.

CELLFLEX® Cable

UCF78-50A Series
7/8" Ultraflexible Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Ultraflexible
Size	7/8"
STRUCTURE	
Inner Conductor Material	Corrugated Copper Tube
Diameter Inner Conductor, mm (in)	9.42 (0.371)
Diameter Dielectric, mm (in)	21.1 (0.83)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	24.89 (0.980)
Diameter over Jacket Nominal, mm (in)	27.48 (1.082)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.432 (0.290)
Minimum Bending Radius, Single Bend, mm (in)	90 (3.5)
Minimum Bending Radius, Repeated Bends, mm (in)	125 (5)
Bending Moment, N•m (lb-ft)	13.0 (9.6)
Flat Plate Crush Strength, N/mm (lb/in)	14.3 (80)
Recommended / Maximum Clamp Spacing, m (ft)	0.8 / 1.0 (2.75 / 3.25)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	88
Capacitance, pF/m (pF/ft)	76 (23.2)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	4.9
Peak Power Rating, kW	83
RF Peak Voltage, volts	2850
Jacket Spark, volt RMS	8000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	2.82 (0.86)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.04 (0.32)

See Installation, Operation and Storage Temperatures on page 16.

UCF78-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.084	0.026	21.5
1.0	0.119	0.036	21.5
1.5	0.146	0.044	21.5
2.0	0.169	0.051	21.5
10	0.379	0.116	21.5
20	0.539	0.164	18.8
30	0.662	0.202	15.3
50	0.860	0.262	11.8
88	1.15	0.351	8.80
100	1.23	0.375	8.24
108	1.28	0.390	7.91
150	1.52	0.462	6.67
174	1.64	0.500	6.17
200	1.76	0.537	5.74
300	2.18	0.665	4.64
400	2.54	0.775	3.98
450	2.71	0.826	3.74
500	2.87	0.874	3.53
512	2.90	0.885	3.49
600	3.16	0.964	3.20
700	3.44	1.05	2.94
800	3.70	1.13	2.74
824	3.76	1.15	2.69
894	3.93	1.20	2.57
900	3.94	1.20	2.57
925	4.00	1.22	2.53
960	4.09	1.25	2.48
1000	4.18	1.27	2.42
1250	4.73	1.44	2.14
1500	5.24	1.60	1.93
1700	5.62	1.71	1.80
1800	5.81	1.77	1.74
2000	6.16	1.88	1.64
2100	6.34	1.93	1.60
2200	6.51	1.98	1.55
2400	6.84	2.09	1.48
3000	7.79	2.37	1.30
3500	8.52	2.60	1.19
4000	9.22	2.81	1.10
4900	10.4	3.17	0.972

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

CONNECTORS AND ACCESSORIES	
Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

ORDERING INFORMATION

Model Number	Jacket
UCF78-50JA	Standard
UCF78-50JFNA	Flame Retardant

CELLFLEX® Cable

UCF114-50A Series
1-1/4" Ultraflexible Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Ultraflexible
Size	1-1/4"
STRUCTURE	
Inner Conductor Material	Corrugated Copper Tube
Diameter Inner Conductor, mm (in)	13.6 (0.54)
Diameter Dielectric, mm (in)	31.2 (1.23)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	36.0 (1.42)
Diameter over Jacket Nominal, mm (in)	39.0 (1.54)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.81 (0.55)
Minimum Bending Radius, Single Bend, mm (in)	150 (6.0)
Minimum Bending Radius, Repeated Bends, mm (in)	250 (10)
Bending Moment, Nxm (lb-ft)	36.0 (25.6)
Flat Plate Crush Strength, N/mm (lb/in)	25.5 (140)
Tensile Strength, N (lb)	2900 (650)
Recommended / Maximum Clamp Spacing, m (ft)	1.0 / 1.2 (3.25 / 4.0)
ELECTRICAL SPECIFICATIONS	
Impedance, Ohm	50 +/- 1
Velocity, percent	89
Capacitance, pF/m (pF/ft)	75 (22.9)
Inductance, µH/m (µH/ft)	0.184 (0.056)
Maximum Frequency, GHz	3.6
Peak Power Rating, kW	178
RF Peak Voltage, Volts	4200
Jacket Spark, Volt RMS	10000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	2.20 (0.67)
Outer Conductor dc Resistance, ohm/1000 m (Ohm/1000 ft)	0.62 (0.19)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

UCF114-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.060	0.018	178
1	0.085	0.026	131
1.5	0.104	0.032	107
2	0.120	0.037	92.2
10	0.271	0.083	40.8
20	0.386	0.118	28.7
30	0.475	0.145	23.3
50	0.619	0.189	17.9
88	0.831	0.253	13.3
100	0.889	0.271	12.4
108	0.926	0.282	11.9
150	1.10	0.336	10.0
174	1.19	0.364	9.26
200	1.29	0.392	8.60
300	1.60	0.488	6.90
400	1.87	0.571	5.90
450	2.00	0.610	5.53
500	2.12	0.646	5.21
512	2.15	0.655	5.14
600	2.35	0.716	4.71
700	2.56	0.781	4.32
800	2.76	0.842	4.00
824	2.81	0.856	3.93
894	2.94	0.897	3.75
900	2.96	0.901	3.74
925	3.00	0.915	3.68
960	3.07	0.935	3.60
1000	3.14	0.957	3.52
1250	3.57	1.09	3.09
1500	3.98	1.21	2.78
1700	4.28	1.31	2.58
1800	4.43	1.35	2.49
2000	4.72	1.44	2.34
2100	4.86	1.48	2.27
2200	5.00	1.52	2.21
2400	5.27	1.61	2.10
3000	6.05	1.84	1.83
3300	6.42	1.96	1.72

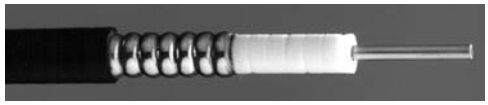
Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
UCF114-50JA	Standard
UCF114-50JFNA	Flame Retardant

CELLFLEX® Cable

LCF14-50 Series
1/4" Low-Loss Foam Coax



APPLICATIONS

OEM jumpers, BTS inter-cabinet connections, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	1/4"
STRUCTURE	
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	2.4 (0.09)
Diameter Dielectric, mm (in)	6.0 (0.24)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	7.5 (0.3)
Diameter over Jacket Nominal, mm (in)	10 (0.39)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.11 (0.074)
Minimum Bending Radius, Single Bend, mm (in)	40 (1.6)
Minimum Bending Radius, Repeated Bends, mm (in)	120 (5)
Bending Moment, N•m (lb-ft)	1.9 (1.4)
Flat Plate Crush Strength, N/mm (lb/in)	14 (80)
Tensile Strength, N (lb)	890 (200)
Recommended / Maximum Clamp Spacing, m (ft)	0.5 / 1.0 (1.75 / 3.25)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1.5
Velocity, percent	83
Capacitance, pF/m (pF/ft)	80 (24)
Inductance, µH/m (µH/ft)	0.205 (0.063)
Maximum Frequency, GHz	15.8
Peak Power Rating, kW	10.9
RF Peak Voltage, volts	1050
Jacket Spark, volt RMS	5000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	6.1 (1.86)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	3.5 (1.25)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF14-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.291	0.089	10.9
1	0.412	0.126	10.9
1.5	0.505	0.154	10.9
2	0.583	0.178	10.9
10	1.31	0.399	5.6
20	1.86	0.566	3.9
30	2.28	0.695	3.2
50	2.95	0.900	2.5
88	3.94	1.20	1.9
100	4.20	1.28	1.7
108	4.37	1.33	1.7
150	5.17	1.58	1.4
174	5.58	1.70	1.3
200	6.00	1.83	1.2
300	7.40	2.25	0.985
400	8.59	2.62	0.848
450	9.13	2.78	0.798
500	9.65	2.94	0.755
512	9.77	2.98	0.745
600	10.6	3.24	0.686
700	11.5	3.51	0.632
800	12.4	3.77	0.589
824	12.6	3.83	0.580
894	13.1	4.00	0.556
900	13.2	4.01	0.554
925	13.4	4.07	0.546
960	13.6	4.15	0.535
1000	13.9	4.24	0.523
1250	15.7	4.78	0.464
1500	17.3	5.27	0.421
1700	18.5	5.64	0.393
1800	19.1	5.82	0.381
2000	20.2	6.17	0.360
2100	20.8	6.33	0.351
2200	21.3	6.49	0.342
2400	22.3	6.81	0.326
3000	25.3	7.71	0.288
3500	27.5	8.40	0.265
4000	29.7	9.05	0.245
4900	33.3	10.1	0.219
6000	37.4	11.4	0.195
7000	40.8	12.4	0.178
8000	44.1	13.5	0.165
9000	47.3	14.4	0.154
10000	50.3	15.3	0.145
12000	56.1	17.1	0.130
14000	61.5	18.8	0.118
15800	66.2	20.2	0.110

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF14-50J	Standard
LCF14-50JFN	Flame Retardant

Phase stabilized versions available upon request.

CELLFLEX® Cable

LCF38-50 Series
3/8" Low-Loss Foam Coax

APPLICATIONS

OEM jumpers, BTS inter-cabinet connections, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION

Cable Type	Foam-Dielectric, Corrugated
Size	3/8"

STRUCTURE

Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	3.1 (0.12)
Diameter Dielectric, mm (in)	7.2 (0.28)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	9.5 (0.37)
Diameter over Jacket Nominal, mm (in)	11.2 (0.44)

MECHANICAL SPECIFICATIONS

Cable Weight, kg/m (lb/ft)	0.12 (0.08)
Minimum Bending Radius, Single Bend, mm (in)	50 (2)
Minimum Bending Radius, Repeated Bends, mm (in)	95 (4)
Bending Moment, N•m (lb-ft)	1.9 (1.4)
Flat Plate Crush Strength, N/mm (lb/in)	20.4 (110)
Tensile Strength, N (lb)	530 (119)
Recommended / Maximum Clamp Spacing, m (ft)	0.5 / 1.0 (1.75 / 3.25)

ELECTRICAL SPECIFICATIONS

Impedance, ohm	50 +/- 1.5
Velocity, percent	88
Capacitance, pF/m (pF/ft)	76.0 (23.2)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	13.5
Peak Power Rating, kW	15.4
RF Peak Voltage, volts	1240
Jacket Spark, volt RMS	5000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	3.8 (1.16)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	2.9 (0.88)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF38-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.237	0.072	15.4
1	0.336	0.102	15.4
1.5	0.412	0.125	15.4
2	0.476	0.145	15.2
10	1.0673	0.325	6.79
20	1.51	0.461	4.79
30	1.86	0.566	3.90
50	2.41	0.734	3.01
88	3.21	0.978	2.26
100	3.43	1.04	2.12
108	3.56	1.09	2.04
150	4.21	1.29	1.72
174	4.55	1.39	1.59
200	4.89	1.49	1.48
300	6.02	1.84	1.20
400	7.00	2.13	1.04
450	7.44	2.27	0.975
500	7.86	2.40	0.923
512	7.96	2.43	0.911
600	8.65	2.64	0.838
700	9.38	2.86	0.773
800	10.1	3.07	0.720
824	10.2	3.12	0.709
894	10.7	3.26	0.679
900	10.7	3.27	0.677
925	10.9	3.32	0.667
960	11.1	3.38	0.654
1000	11.3	3.46	0.640
1250	12.8	3.89	0.568
1500	14.1	4.29	0.515
1700	15.1	4.60	0.481
1800	15.5	4.74	0.467
2000	16.5	5.02	0.441
2100	16.9	5.15	0.429
2200	17.3	5.29	0.418
2400	18.2	5.55	0.399
3000	20.5	6.27	0.353
3500	22.4	6.83	0.324
4000	24.1	7.36	0.301
4900	27.0	8.25	0.268
6000	30.3	9.26	0.239
7000	33.2	10.12	0.219
8000	35.8	10.94	0.202
9000	38.4	11.72	0.189
10000	40.8	12.47	0.178
12000	45.5	13.89	0.159
13500	48.8	14.91	0.149

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

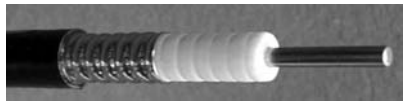
ORDERING INFORMATION

Model Number	Jacket
LCF38-50J	Standard
LCF38-50JFN	Flame Retardant

Phase stabilized versions available upon request.

CELLFLEX® Cable

LCF12-50 Series
1/2" Low-Loss Foam Coax



APPLICATIONS

OEM jumpers, Main feed transitions to equipment, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	1/2"
STRUCTURE	
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter Inner Conductor, mm (in)	4.8 (0.190)
Diameter Dielectric, mm (in)	11.3 (0.44)
Outer Conductor Material	Annularly Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	13.8 (0.54)
Diameter over Jacket Nominal, mm (in)	16.2 (0.64)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.22 (0.15)
Minimum Bending Radius, Single Bend, mm (in)	70 (3)
Minimum Bending Radius, Repeated Bends, mm (in)	125 (5)
Bending Moment, N•m (lb-ft)	5.0 (3.7)
Flat Plate Crush Strength, N/mm (lb/in)	20.4 (110)
Tensile Strength, N (lb)	1100 (247)
Recommended / Maximum Clamp Spacing, m (ft)	0.6 / 1.0 (2.0 / 3.25)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	88
Capacitance, pF/m (pF/ft)	76.0 (23.2)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	8.8
Peak Power Rating, kW	38
RF Peak Voltage, volts	1950
Jacket Spark, volt RMS	8000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.57 (0.48)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.93 (0.59)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF12-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.149	0.045	20.5
1	0.211	0.064	20.5
1.5	0.258	0.079	20.5
2	0.298	0.091	20.5
10	0.671	0.204	12.7
20	0.951	0.290	8.93
30	1.17	0.356	7.27
50	1.51	0.462	5.61
88	2.02	0.616	4.20
100	2.16	0.658	3.94
108	2.24	0.684	3.78
150	2.66	0.810	3.20
174	2.87	0.875	2.96
200	3.08	0.940	2.75
300	3.81	1.16	2.23
400	4.43	1.35	1.92
450	4.71	1.44	1.80
500	4.98	1.52	1.71
512	5.04	1.54	1.69
600	5.48	1.67	1.55
700	5.95	1.81	1.43
800	6.39	1.95	1.33
824	6.49	1.98	1.31
894	6.78	2.07	1.25
900	6.80	2.07	1.25
925	6.90	2.10	1.23
960	7.04	2.15	1.21
1000	7.20	2.20	1.18
1250	8.12	2.48	1.05
1500	8.97	2.73	0.947
1700	9.61	2.93	0.884
1800	9.91	3.02	0.857
2000	10.5	3.20	0.809
2100	10.8	3.29	0.787
2200	11.1	3.38	0.767
2400	11.6	3.54	0.731
3000	13.2	4.01	0.645
3500	14.4	4.38	0.591
4000	15.5	4.73	0.548
4900	17.4	5.31	0.488
6000	19.6	5.97	0.434
7000	21.4	6.54	0.396
8000	23.2	7.08	0.366
8800	24.6	7.49	0.346

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF12-50J	Standard
LCF12-50JFN	Flame Retardant
LCF12-50JGR	Standard, Gray

Phase stabilized versions available upon request.

CELLFLEX® Cable

LCF58-50 Series
5/8" Low-Loss Foam Coax

APPLICATIONS

OEM jumpers, Microwave Hop feeds, GPS lines, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	5/8"
STRUCTURE	
Inner Conductor Material	Copper Tube
Diameter Inner Conductor, mm (in)	6.6 (0.26)
Diameter Dielectric, mm (in)	15.5 (0.61)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	18.5 (0.73)
Diameter over Jacket Nominal, mm (in)	21.4 (0.84)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.37 (0.25)
Minimum Bending Radius, Single Bend, mm (in)	90 (4)
Minimum Bending Radius, Repeated Bends, mm (in)	190 (7)
Bending Moment, N•m (lb-ft)	10.0 (7.4)
Flat Plate Crush Strength, N/mm (lb/in)	13.3 (70)
Tensile Strength, N (lb)	1150 (259)
Recommended / Maximum Clamp Spacing, m (ft)	0.7 / 1.0 (2.25 / 3.25)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	88
Capacitance, pF/m (pF/ft)	76.0 (23.2)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	6.2
Peak Power Rating, kW	45
RF Peak Voltage, volts	2110
Jacket Spark, volt RMS	8000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.32 (0.40)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.43 (0.44)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF58-50J/JFN ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.112	0.034	45.0
1	0.158	0.048	45.0
1.5	0.194	0.059	45.0
2	0.224	0.068	41.7
10	0.504	0.154	18.5
20	0.716	0.218	13.0
30	0.881	0.269	10.6
50	1.14	0.349	8.16
88	1.53	0.467	6.10
100	1.64	0.499	5.71
108	1.70	0.519	5.48
150	2.02	0.616	4.62
174	2.18	0.666	4.28
200	2.35	0.716	3.97
300	2.91	0.887	3.21
400	3.39	1.03	2.75
450	3.62	1.10	2.58
500	3.83	1.17	2.44
512	3.88	1.18	2.41
600	4.22	1.29	2.21
700	4.59	1.40	2.03
800	4.94	1.51	1.89
824	5.02	1.53	1.86
894	5.25	1.60	1.78
900	5.27	1.61	1.77
925	5.35	1.63	1.74
960	5.46	1.67	1.71
1000	5.59	1.70	1.67
1250	6.33	1.93	1.47
1500	7.01	2.14	1.33
1700	7.53	2.30	1.24
1800	7.78	2.37	1.20
2000	8.26	2.52	1.13
2100	8.50	2.59	1.10
2200	8.73	2.66	1.07
2400	9.18	2.80	1.02
3000	10.5	3.19	0.893
3500	11.5	3.49	0.815
4000	12.4	3.78	0.753
4900	14.0	4.27	0.666
6000	15.9	4.83	0.589
6200	16.2	4.93	0.577

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF58-50J	Standard
LCF58-50JFN	Flame Retardant

CELLFLEX® Cable

LCF78-50A Series
7/8" Low-Loss Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	7/8"
STRUCTURE	
Inner Conductor Material	Copper Tube
Diameter Inner Conductor, mm (in)	9.3 (0.37)
Diameter Dielectric, mm (in)	21.5 (0.85)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	25.2 (0.99)
Diameter over Jacket Nominal, mm (in)	27.8 (1.09)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	0.51 (0.34)
Minimum Bending Radius, Single Bend, mm (in)	120 (5)
Minimum Bending Radius, Repeated Bends, mm (in)	250 (10)
Bending Moment, N•m (lb-ft)	13.0 (9.6)
Flat Plate Crush Strength, N/mm (lb/in)	14 (80)
Tensile Strength, N (lb)	1440 (324)
Recommended / Maximum Clamp Spacing, m (ft)	0.8 / 1.0 (2.75 / 3.25)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	89
Capacitance, pF/m (pF/ft)	75.0 (22.9)
Inductance, µH/m (µH/ft)	0.187 (0.057)
Maximum Frequency, GHz	5
Peak Power Rating, kW	85
RF Peak Voltage, volts	2910
Jacket Spark, volt RMS	8000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.17 (0.36)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.05 (0.32)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF78-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.078	0.024	85.0
1	0.111	0.034	85.0
1.5	0.136	0.041	77.1
2	0.157	0.048	66.8
10	0.353	0.107	28.1
20	0.501	0.153	20.9
30	0.616	0.188	17.0
50	0.801	0.244	13.1
88	1.07	0.327	9.75
100	1.15	0.349	9.12
108	1.19	0.363	8.76
150	1.42	0.431	7.38
174	1.53	0.466	6.83
200	1.65	0.501	6.35
300	2.04	0.622	5.12
400	2.38	0.725	4.39
450	2.54	0.773	4.12
500	2.69	0.818	3.89
512	2.72	0.829	3.84
600	2.97	0.903	3.52
700	3.23	0.983	3.24
800	3.47	1.06	3.01
824	3.53	1.08	2.96
894	3.69	1.12	2.83
900	3.71	1.13	2.82
925	3.76	1.15	2.78
960	3.84	1.17	2.72
1000	3.93	1.20	2.66
1250	4.45	1.36	2.35
1500	4.94	1.50	2.12
1700	5.30	1.61	1.97
1800	5.48	1.67	1.91
2000	5.82	1.77	1.80
2100	5.99	1.82	1.75
2200	6.15	1.87	1.70
2400	6.47	1.97	1.61
3000	7.38	2.25	1.42
3500	8.09	2.46	1.29
4000	8.76	2.67	1.19
4900	9.91	3.02	1.05
5000	10.0	3.06	1.04

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF78-50JA	Standard
LCF78-50JAGR	Standard, Gray
LCF78-50JFNA	Flame Retardant

CELLFLEX® Cable

LCFS114-50A Series
1-1/4" Low-Loss Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	1-1/4"
STRUCTURE	
Inner Conductor Material	Copper Tube
Diameter Inner Conductor, mm (in)	13.1 (0.52)
Diameter Dielectric, mm (in)	31.2 (1.23)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	36.0 (1.42)
Diameter over Jacket Nominal, mm (in)	39.0 (1.54)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	1.02 (0.69)
Minimum Bending Radius, Single Bend, mm (in)	200 (8)
Minimum Bending Radius, Repeated Bends, mm (in)	380 (15)
Bending Moment, Nxm (lb-ft)	43.0 (32.0)
Flat Plate Crush Strength, N/mm (lb/in)	25.5 (140)
Tensile Strength, N (lb)	2490 (560)
Recommended / Maximum Clamp Spacing, m (ft)	1.0 / 1.2 (3.25 / 4.0)
ELECTRICAL SPECIFICATIONS	
Impedance, Ohm	50 +/- 1
Velocity, percent	89
Capacitance, pF/m (pF/ft)	75.0 (22.9)
Inductance, µH/m (µH/ft)	0.184 (0.056)
Maximum Frequency, GHz	3.6
Peak Power Rating, kW	176
RF Peak Voltage, Volts	4200
Jacket Spark, Volt RMS	10000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	0.72 (0.22)
Outer Conductor dc Resistance, ohm/1000 m (Ohm/1000 ft)	0.58 (0.18)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCFS114-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.056	0.017	176
1	0.079	0.024	132
1.5	0.097	0.030	108
2 0.	112	0.034	93.3
10	0.253	0.077	41.3
20	0.361	0.110	29.0
30	0.444	0.135	23.5
50	0.579	0.176	18.1
88	0.777	0.237	13.5
100	0.831	0.253	12.6
108	0.866	0.264	12.1
150	1.03	0.314	10.1
174	1.12	0.340	9.37
200	1.20	0.366	8.70
300	1.50	0.456	6.98
400	1.75	0.534	5.96
450	1.87	0.570	5.59
500	1.98	0.605	5.27
512	2.01	0.613	5.20
600	2.20	0.670	4.76
700	2.40	0.731	4.36
800	2.59	0.788	4.04
824	2.63	0.802	3.98
894	2.76	0.840	3.80
900	2.77	0.843	3.78
925	2.81	0.856	3.72
960	2.87	0.875	3.64
1000	2.94	0.896	3.56
1250	3.35	1.02	3.13
1500	3.72	1.14	2.81
1700	4.01	1.22	2.61
1800	4.15	1.27	2.52
2000	4.42	1.35	2.37
2100	4.55	1.39	2.30
2200	4.68	1.43	2.23
2400	4.94	1.51	2.12
3000	5.66	1.73	1.85
3300	6.01	1.83	1.74

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCFS114-50JA	Standard
LCFS114-50JAGR	Standard, Gray
LCFS114-50JFNA	Flame Retardant

CELLFLEX® Cable

LCF158-50A Series
1-5/8" Low-Loss Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	1-5/8"
STRUCTURE	
Inner Conductor Material	Corrugated Copper Tube
Diameter Inner Conductor, mm (in)	17.6 (0.69)
Diameter Dielectric, mm (in)	40.9 (1.61)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	46.5 (1.83)
Diameter over Jacket Nominal, mm (in)	50.3 (1.98)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	1.19 (0.80)
Minimum Bending Radius, Single Bend, mm (in)	200 (8)
Minimum Bending Radius, Repeated Bends, mm (in)	500 (20)
Bending Moment, N•m (lb-ft)	46.0 (34.0)
Flat Plate Crush Strength, N/mm (lb/in)	30.6 (175)
Tensile Strength, N (lb)	3300 (750)
Recommended / Maximum Clamp Spacing, m (ft)	1.2 / 1.5 (4.0 / 5.0)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	89
Capacitance, pF/m (pF/ft)	75.0 (22.9)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	2.75
Peak Power Rating, kW	310
RF Peak Voltage, volts	5600
Jacket Spark, volt RMS	10000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.26 (0.38)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	0.42 (0.12)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF158-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.044	0.013	266
1	0.062	0.019	188
1.5	0.076	0.023	153
2	0.088	0.027	132
10	0.199	0.060	58.5
20	0.283	0.086	41.0
30	0.350	0.106	33.2
50	0.456	0.139	25.5
88	0.615	0.187	18.9
100	0.658	0.201	17.6
108	0.686	0.209	16.9
150	0.819	0.249	14.2
174	0.888	0.270	13.1
200	0.958	0.292	12.1
300	1.20	0.365	9.70
400	1.41	0.429	8.25
450	1.50	0.458	7.72
500	1.60	0.486	7.27
512	1.62	0.493	7.18
600	1.77	0.540	6.55
700	1.94	0.590	5.99
800	2.10	0.638	5.54
824	2.13	0.649	5.45
894	2.24	0.681	5.19
900	2.25	0.684	5.17
925	2.28	0.695	5.09
960	2.33	0.711	4.98
1000	2.39	0.728	4.86
1250	2.73	0.832	4.25
1500	3.05	0.929	3.81
1700	3.29	1.00	3.53
1800	3.41	1.04	3.40
2000	3.64	1.11	3.19
2100	3.76	1.14	3.09
2200	3.87	1.18	3.00
2400	4.09	1.24	2.84
2750	4.45	1.36	2.61

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20˚ C (68˚ F).
For average power: VSWR 1.0, ambient temperature 40˚ C (104˚F), inner conductor temperature 100˚ C (212˚ F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF158-50JA	Standard
LCF158-50JFNA	Flame Retardant

CELLFLEX® Cable

LCF214-50A Series
2-1/4" Low-Loss Foam Coax

APPLICATIONS
Main feed line, Riser-rated In-Building (JFN types)

GENERAL INFORMATION	
Cable Type	Foam-Dielectric, Corrugated
Size	2-1/4"
STRUCTURE	
Inner Conductor Material	Corrugated Copper Tube
Diameter Inner Conductor, mm (in)	20.8 (0.82)
Diameter Dielectric, mm (in)	49.0 (1.93)
Outer Conductor Material	Corrugated Copper
Diameter Copper Outer Conductor, mm (in)	56.1 (2.21)
Diameter over Jacket Nominal, mm (in)	59.9 (2.36)
MECHANICAL SPECIFICATIONS	
Cable Weight, kg/m (lb/ft)	1.70 (1.14)
Minimum Bending Radius, Single Bend, mm (in)	280 (11)
Minimum Bending Radius, Repeated Bends, mm (in)	560 (22)
Bending Moment, N•m (lb-ft)	81.0 (60.0)
Flat Plate Crush Strength, N/mm (lb/in)	27.6 (150)
Tensile Strength, N (lb)	2610 (587)
Recommended / Maximum Clamp Spacing, m (ft)	1.5 / 2.0 (5.0 / 6.6)
ELECTRICAL SPECIFICATIONS	
Impedance, ohm	50 +/- 1
Velocity, percent	88
Capacitance, pF/m (pF/ft)	75.0 (22.9)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Maximum Frequency, GHz	2.2
Peak Power Rating, kW	425
RF Peak Voltage, volts	6520
Jacket Spark, volt RMS	10000
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	0.92 (0.28)
Outer Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	0.31 (0.09)

See Installation, Operation and Storage Temperatures on page 16.

CONNECTORS AND ACCESSORIES

Connectors	See pages 53-55
Jumpers	See pages 60-65
Accessories	See pages 75-80
Coaxial Devices	See pages 84-85
Technical Appendix	See pages 831-840

LCF214-50JA/JFNA ATTENUATION AND AVERAGE POWER

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft.	Average Power kW
0.5	0.037	0.011	321
1	0.052	0.016	226
1.5	0.064	0.020	184
2	0.074	0.023	159
10	0.169	0.051	70.2
20	0.241	0.074	49.0
30	0.298	0.091	39.7
50	0.390	0.119	30.3
88	0.528	0.161	22.4
100	0.566	0.172	20.9
108	0.590	0.180	20.1
150	0.706	0.215	16.8
174	0.766	0.233	15.5
200	0.827	0.252	14.3
300	1.04	0.317	11.4
400	1.23	0.373	9.66
450	1.31	0.400	9.02
500	1.39	0.425	8.49
512	1.41	0.431	8.37
600	1.55	0.473	7.63
700	1.70	0.518	6.96
800	1.84	0.562	6.42
824	1.88	0.572	6.31
894	1.97	0.601	6.01
900	1.98	0.603	5.98
925	2.01	0.613	5.88
960	2.06	0.627	5.75
1000	2.11	0.643	5.61
1250	2.42	0.738	4.89
1500	2.71	0.827	4.36
1700	2.94	0.895	4.03
1800	3.05	0.928	3.89
2000	3.26	0.993	3.63
2100	3.36	1.02	3.52
2200	3.47	1.06	3.41

Standard Conditions:
For attenuation: VSWR 1.0, cable temperature 20° C (68° F).
For average power: VSWR 1.0, ambient temperature 40° C (104°F), inner conductor temperature 100° C (212° F). No solar loading.

ORDERING INFORMATION

Model Number	Jacket
LCF214-50JA	Standard
LCF214-50JFNA	Flame Retardant