



1/2" Foam Dielectric, LDF Series – 50-ohm



LDF4-50A

Description	Type No.
Cable Ordering Information	
Standard Cable	
1/2" Standard Cable, Standard Jacket	LDF4-50A
Fire Retardant Cables	
1/2" Fire Retardant Jacket (CATVX)	LDF4RN-50A
1/2" Fire Retardant Jacket (CATVR)	LDF4RN-50A
Low VSWR and Specialized Cables	
1/2" Low VSWR, specify operating band	LDF4P-50A-(**)
Phase Stabilized and Phase Measured Cable	See page 590
Jumper Cable Assemblies – See page 584	
** Insert suffix number from "Low VSWR Specifications" table, page 498	
Characteristics	
Electrical	
Impedance, ohms	50 ± 1
Maximum Frequency, GHz	8.8
Velocity, percent	88
Peak Power Rating, kW	40
dc Resistance, ohms/1000 ft (1000 m)	
Inner	0.45 (1.48)
Outer	0.58 (1.90)
dc Breakdown, volts	4000
Jacket Spark, volts RMS	8000
Capacitance, pF/ft (m)	23.1 (75.8)
Inductance, µH/ft (m)	0.058 (0.19)
Mechanical	
Outer Conductor	Copper
Inner Conductor	Copper-Clad Aluminum
Diameter over Jacket, in (mm)	0.63 (16)
Diameter over Copper Outer Conductor, in (mm)	0.55 (14)
Diameter Inner Conductor, in (mm)	0.189 (4.6)
Nominal Inside Transverse Dimensions, cm	1.11
Minimum Bending Radius, in (mm)	5 (125)
Number of Bends, minimum (typical)	15 (50)
Bending Moment, lb-ft (N•m)	2.8 (3.8)
Cable Weight, lb/ft (kg/m)	0.15 (0.22)
Tensile Strength, lb (kg)	250 (113)
Flat Plate Crush Strength, lb/in (kg/mm)	110 (2.0)

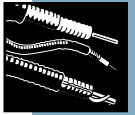
Attenuation and Average Power Ratings

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100 m	Average Power, kW
0.5	0.045	0.149	40.0
1	0.064	0.211	35.8
1.5	0.079	0.259	29.2
2	0.091	0.299	25.3
10	0.205	0.672	11.3
20	0.291	0.954	7.93
30	0.357	1.17	6.46
50	0.463	1.52	4.98
88	0.619	2.03	3.73
100	0.661	2.17	3.49
108	0.688	2.26	3.36
150	0.815	2.67	2.83
174	0.880	2.89	2.62
200	0.946	3.10	2.44
300	1.17	3.83	1.97
400	1.36	4.46	1.70
450	1.45	4.75	1.59
500	1.53	5.02	1.51
512	1.55	5.08	1.49
600	1.69	5.53	1.37
700	1.83	6.01	1.26
800	1.97	6.46	1.17
824	2.00	6.56	1.15
894	2.09	6.85	1.10
960	2.17	7.12	1.06
1000	2.22	7.28	1.04
1250	2.51	8.23	0.921
1500	2.77	9.09	0.833
1700	2.97	9.74	0.777
1800	3.07	10.1	0.753
2000	3.25	10.7	0.710
2100	3.34	11.0	0.691
2200	3.43	11.2	0.673
2300	3.52	11.5	0.657
3000	4.09	13.4	0.565
3400	4.39	14.4	0.526
4000	4.82	15.8	0.479
5000	5.49	18.0	0.421
6000	6.11	20.1	0.378
8000	7.26	23.8	0.318
8800	7.69	25.2	0.300

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.



N Male
L4PNM-RC



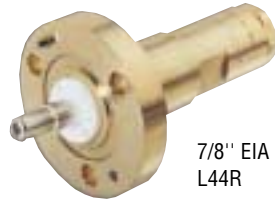
N Female
L4PNF-RC



7-16 DIN Male
L4PDM-RC



7-16 DIN Female
L4PDF-RC



7/8" EIA Flange
L44R



UHF Male
L44P

Connectors

Interface	Description	Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Max. Length in (mm)	Max. Dia. in (mm)
N Male	Hex Head	L4PNM-H	Solder	Self-Flare	SG	2.6 (66)	0.95 (24.1)
N Male	RingFlare	L4PNM-RC	Captivated	RingFlare	SG	3.0 (75.7)	0.86 (21.8)
N Male	Right Angle, Hex	L4PNR-H	Solder	Self-Flare	SG	3.2/1.5 (81/38)	0.95 (24.1)
N Male	Right Angle, Hex	L4PNR-HC	Captivated	Self-Flare	SG	3.2/1.5 (81/38)	0.91 (23.1)
N Female	–	L4PNF	Solder	Self-Flare	SG	2.6 (66)	0.94 (23.9)
N Female	Bulk Head	L4PNF-BH	Solder	Self-Flare	SG	2.6 (66)	0.96 (24.4)
N Female	Panel Mount	L4PNF-PM	Solder	Self-Flare	SG	2.6 (66)	1.0 (25.4)
N Female	RingFlare	L4PNF-RC	Captivated	RingFlare	SG	2.8 (71)	0.86 (21.8)
7-16 DIN Male	–	L4PDM	Solder	Self-Flare	SS	2.6 (66)	1.4 (35.6)
7-16 DIN Male	Right Angle	L4PDR	Solder	Self-Flare	SS	1.8/2.8 (46/72)	1.41 (35.9)
7-16 DIN Male	Right Angle	L4PDR-C	Captivated	Self-Flare	SS	1.8/2.8 (46/72)	1.41 (35.9)
7-16 DIN Male	RingFlare	L4PDM-RC	Captivated	Ring-Flare	SS	2.64 (67.1)	0.86 (21.8)
7-16 DIN Female	–	L4PDF	Solder	Self-Flare	SS	2.7 (69)	1.1 (27.9)
7-16 DIN Female	Bulk Head	L4PDF-BH	Solder	Self-Flare	SS	2.73 (69.4)	1.62 (41.1)
7-16 DIN Female	Bulk Head	L4PDF-BHC	Captivated	Self-Flare	SS	2.9 (74)	1.63 (41.4)
7-16 DIN Female	Panel Mount	L4PDF-PM	Solder	Self-Flare	SS	2.7 (69)	1.2 (29.4)
7-16 DIN Female	RingFlare	L4PDF-RC	Captivated	RingFlare	SS	2.8 (71)	0.86 (21.8)
7/8" EIA Flange	–	L44R	Solder	Self-Flare	BB	3.2 (81)	2.25 (57.2)
7/8" EIA Flange	Right Angle	124990-1	Solder	Self-Flare	BB	2.3/1.6 (58/41)	2.25 (57.2)
F Flange Male	–	L44F	Solder	Self-Flare	BB	2.3 (58)	2.25 (57.2)
F Flange Female	–	209865	Solder	Self-Flare	BS	2.3 (58)	2.25 (57.2)
UHF Male	–	L44P	Solder	Self-Flare	BB	2.3 (58)	0.91 (23.1)
UHF Female	–	L44U	Solder	Self-Flare	BS	2.3 (58)	0.91 (23.1)
HN Male	–	L44J	Solder	Self-Flare	BB	2.5 (64)	0.91 (23.1)
LC Male	–	L44M	Solder	Self-Flare	BB	3.6 (91)	0.91 (23.1)
TNC Female	–	L44NT	Solder	Self-Flare	BB	2.8 (71)	0.94 (23.9)
End Terminal	–	L44T	Solder	Self-Flare	BB	4.0 (102)	0.91 (23.1)
Splice	–	L44Z	Solder	Self-Flare	BB	3.2 (81)	1.1 (27.9)

Plating Codes: BB - Brass Body and Pin, BS - Brass Body and Silver Plated Pin, SG - Silver Plated Body and Gold Plated Pin, SS - Silver Plated Body and Pin

Connector Accessories – See page 624

Factory Attached Connectors – For factory made cable assemblies and jumper cables, see pages 584-587.