3/8" Foam Dielectric, LDF Series – *50-ohm*

LDF2-50

Description	Type No.

Cable Ordering Information

Standard Cable	
3/8" Standard Cable, Standard Jacket	**LDF2-50**
Fire Retardant Cables	
3/8" Fire Retardant Jacket (CATVX)	**LDF2RN-50**
3/8" Fire Retardant Jacket (CATVR)	**LDF2RN-50**
Low VSWR and Specialized Cables	
3/8" Low VSWR, specify operating band Phase Stabilized and Phase Measured Cable	**LDF2P-50-(**)** See page 590
Jumper Cable Assemblies – See page 584	

** Insert suffix number from "Low VSWR Specifications" table, page 495

Characteristics

Electrical	
Impedance, ohms	50 ± 1
Maximum Frequency, GHz	13.5
Velocity, percent	88
Peak Power Rating, kW	15.6
dc Resistance, ohms/1000 ft (1000 m)	
Inner	1.06 (3.48)
Outer	0.87 (2.85)
dc Breakdown, volts	2500
Jacket Spark, volts RMS	5000
Capacitance, pF/ft (m)	23.0 (75.5)
Inductance, µH/ft (m)	0.058 (0.19)
Mechanical	
Outer Conductor	Copper
Inner Conductor	Copper-Clad Aluminum
Diameter over Jacket, in (mm)	0.44 (11)
Diameter over Copper Outer Conductor, in (mm)	0.38 (9.7)
Diameter Inner Conductor, in (mm)	0.122 (3.1)
Minimum Bending Radius, in (mm)	3.75 (95)
Number of Bends, minimum (typical)	15 (60)
Bending Moment, lb-ft (N•m)	1.4 (1.9)
Cable Weight, lb/ft (kg/m)	0.08 (0.12)
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	0.072	0.235	15.6
1	0.101	0.332	15.6
1.5	0.124	0.407	15.6
2	0.143	0.471	15.6
10	0.323	1.06	7.23
20	0.458	1.50	5.09
30	0.563	1.85	4.14
50	0.730	2.40	3.19
88	0.976	3.20	2.39
100	1.04	3.42	2.24
108	1.08	3.56	2.15
150	1.29	4.22	1.81
174	1.39	4.56	1.68
200	1.49	4.90	1.56
300	1.85	6.06	1.26
400	2.15	7.06	1.08
450	2.29	7.51	1.02
500	2.42	7.95	0.963
512	2.45	8.05	0.951
600	2.67	8.76	0.874
700	2.90	9.52	0.804
800	3.12	10.2	0.748
824	3.17	10.4	0.736
894	3.31	10.9	0.704
960	3.44	11.3	0.678
1000	3.52	11.6	0.663
1250	3.98	13.1	0.586
1500	4.40	14.4	0.530
1700	4.72	15.5	0.494
1800	4.87	16.0	0.479
2000	5.17	17.0	0.451
2100	5.32	17.4	0.439
2200	5.46	17.9	0.428
2300	5.60	18.4	0.417
3000	6.52	21.4	0.358
3400	7.00	23.0	0.333
4000	7.70	25.3	0.303
5000	8.78	28.8	0.266
6000	9.79	32.1	0.239
8000	11.7	38.2	0.200
10000	13.4	43.9	0.175
12000	15.0	49.2	0.156
13500	16.2	53.0	0.145

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
L2PNM-H


N Female
L2PNF


7-16 DIN Male
L2PDM-C


UHF Male
L L42P


TNC Male
L2PTM


SMA Male
L42WS

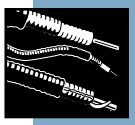
Connectors

Interface	Description	Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Max. Length in (mm)	Max. Dia. in (mm)
N Male	Hex Head	**L2PNM-H**	Solder	Self-Flare	SG	2.1 (53)	0.94 (23.9)
N Male	Hex Head	**L2PNM-HC**	Captivated	Self-Flare	SG	2.1 (53)	0.94 (23.9)
N Female	–	**L2PNF**	Solder	Self-Flare	SG	2.4 (61)	0.63 (16.0)
N Female	Bulk Head	**L2PNF-BH**	Solder	Self-Flare	SG	2.4 (61)	0.88 (22.4)
4.1/9.5 DIN	–	**L2PKM-C**	Captivated	Self-Flare	SS	1.9 (48)	0.95 (24.1)
4.1/9.5 DIN	–	**L2PKM**	Solder	Self-Flare	SS	1.9 (48)	0.95 (24.1)
4.1/9.5 DIN	Right Angle	**L2PKR-C**	Captivated	Self-Flare	SS	2.0/1.5 (50/38)	0.95 (24.1)
7-16 DIN Male	–	**L2PDM-C**	Captivated	Self-Flare	SS	1.9 (48)	1.1 (27.9)
7-16 DIN Female	–	**L2PDF-C**	Captivated	Self-Flare	SS	1.9 (48)	1.4 (35.6)
7-16 DIN Female	Panel Mount	**L2PDF-PMC**	Captivated	Self-Flare	SS	1.9 (48)	1.25 (31.8)
UHF Male	–	**L42P**	Solder	Self-Flare	BB	2.3 (58)	0.68 (17.3)
UHF Female	–	**L42U**	Solder	Self-Flare	BB	2.3 (58)	0.91 (23.1)
SMA Male	–	**L42WS**	Solder	Self-Flare	BG	2.2 (56)	0.68 (17.3)
TNC Male	–	**L42EWT**	Solder	Self-Flare	NG	2.1 (53)	0.68 (17.3)
TNC Female	–	**L42ENT**	Solder	Self-Flare	NG	1.9 (48)	0.68 (17.3)

Plating Codes: BB - Brass Body and Pin, BS - Brass Body and Silver Plated Pin, NG - Nickel Plated Body and Gold 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.



Low VSWR Specifications, Type LDF2P-50-( )

Frequency Band, GHz	Type No.	Using Connector Type**	Assembly VSWR, Maximum (R.L., dB) 0-10 ft (0-3 m)	10-20 ft (3-6 m)
0.806-0.960	**LDF2P-50-40**	N 7-16 DIN	1.08 (28.3) 1.08 (28.3)	1.10 (26.4) 1.10 (26.4)
0.806-0.960 and 1.7- 2.3	**LDF2P-50-42**	N 7-16 DIN	1.10 (26.4) 1.10 (26.4)	1.10 (26.4) 1.10 (26.4)
1.7- 2.3	**LDF2P-50-41**	N 7-16 DIN	1.10 (26.4) 1.10 (26.4)	1.10 (26.4) 1.10 (26.4)
Up to 2.3 *	**LDF2P-50-1**	N Male N Female TNC Male	1.15 (23.1) 1.15 (23.1) 1.20 (20.8)	1.20 (20.8) 1.25 (19.9) 1.30 (17.7)
Up to 4.2 *	**LDF2P-50-2**	N Male N Female	1.20 (20.8) 1.35 (16.6)	1.35 (16.6) 1.45 (14.7)
Up to 8.5 *	**LDF2P-50-3**	N Male	1.25 (19.9)	1.35 (16.6)
Up to 13.5 *	**LDF2P-50-4**	N Male: L2PNM	1.30 (17.7)	1.35 (16.6)

* Specify operating band. ** Connectors ordered separately.
VSWR values apply to straight connectors only, are guaranteed for factory fit assemblies, and are typical for cut lengths. If two different connector interfaces are selected, the higher VSWR value is guaranteed.

Accessories

Description	Type No.
Hangers – For more hangers, adapters and mounting hardware see pages 599-607	
Insulated Hanger, single. Recommended maximum spacing is 2.5 ft (0.76 m). For different spacing recommendations, refer to Cable Hanger Spacing, page 593-598	**11662-3**
Angle Adapter, for insulated hanger	**40430-1**
Nylon Cable Tie Kit of 50, Indoor use, Recommended maximum spacing is 1.5 ft (0.5 m)	**40417**
Nylon Cable Tie Kit in plastic box. 100 each 4, 5.5 and 7.5 inch ties. Indoor use, Recommended maximum spacing is 1.5 ft (0.5 m)	**CT-K350**
Velcro Cable Ties, Black, 8 inch. Indoor Use	
Kit of 10	**VCT8-10**
Kit of 50	**VCT8-50**
Kit of 100	**VCT8-100**
Support/Hoisting Grip. Use at 200-ft (60m) intervals.	
Grip with one clamp	**L2SGRIP**
Support clamp kit of 10	**L2SGRIP-2IK**
Grounding and Surge Protection – for additional grounding kits and our surge protection offerings, see pages 609-616	
Standard Grounding Kit	
Factory attached one-hole lug, 24" lead	**223158**
Factory attached two-hole lug, 24" lead	**223158-2**
Field attached one-hole lug, 36" lead	**223158-3**

Description	Type No.
Weatherproofing – for additional weatherproofing information see pages 617-618	
Cold Shrink Weatherproofing Kit	
3/8" Coax to 3/8" Coax with N Connector	**241475-10**
5/8" Coax to 3/8" Coax	**241475-13**
7/8" Coax to 3/8" Coax	**241475-9**
1-1/4" or 1-5/8" Coax to 3/8" Coax	**241475-5A**
2 1/4" Coax to 3/8" Coax	**241475-8**
3/8" Coax to 1-1/2" Omni Panel Base type N or DIN	**241548-8**
3/8" Coax to 2" Omni Panel Base type N or DIN	**241548-9**
Connector/Splice Weatherproofing Kit	**221213**
Entry Systems – For entry systems offerings see pages 619-620	
Standard Cable Entry Boots	
4" Boots – Three Hole:	**204679A-19**
5" Boots – One Hole:	**48939A-16**
Tools – for additional tool offerings see pages 620-623	
EASIAX® Plus Automated Cable Prep Tool for:	
DIN Connectors	**CPT-E2L2DIN**
N Connectors	**CPT-E2L2N**
DIN Connector Coupling Torque Wrench	**244377**
N Connector Coupling Torque Wrench	**244379**