



7/8" Foam Dielectric, LDF Series – 50-ohm



LDF5-50A

Description	Type No.
Cable Ordering Information	
Standard Cable	
7/8" Standard Cable, Standard Jacket	LDF5-50A
Fire Retardant Cable	
7/8" Fire Retardant Jacket (CATVR)	LDF5RN-50A
Low VSWR and Specialized Cables	
7/8" Low VSWR, specify operating band	LDF5P-50A-(**)

** Insert suffix number from "Low VSWR Specifications" table, page 508.

Characteristics

Electrical	
Impedance, ohms	50 ± 1
Maximum Frequency, GHz	5.0
Velocity, percent	89
Peak Power Rating, kW	91
dc Resistance, ohms/1000 ft (1000 m)	
Inner	0.32 (1.05)
Outer	0.36 (1.18)
dc Breakdown, volts	6000
Jacket Spark, volts RMS	8000
Capacitance, pF/ft (m)	22.8 (75.0)
Inductance, μH/ft (m)	0.057 (0.187)
Mechanical	
Outer Conductor	Copper
Inner Conductor	Copper
Diameter over Jacket, in (mm)	1.09 (28)
Diameter over Copper Outer Conductor, in (mm)	0.98 (24.9)
Diameter Inner Conductor, in (mm)	0.355 (9.0)
Nominal Inside Transverse Dimensions, cm	2.11
Minimum Bending Radius, in (mm)	10 (250)
Number of Bends, minimum (typical)	15 (50)
Bending Moment, lb-ft (N•m)	12 (16.3)
Cable Weight, lb/ft (kg/m)	0.33 (0.49)
Tensile Strength, lb (kg)	325 (147)
Flat Plate Crush Strength, lb/in (kg/mm)	80 (1.4)

* A 75-ohm 7/8" diameter cable is available. Contact Andrew for further information.

Attenuation and Average Power

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100 m	Average Power, kW
0.5	0.025	0.081	91.0
1	0.035	0.115	78.6
1.5	0.043	0.141	64.1
2	0.050	0.163	55.5
10	0.112	0.366	24.6
20	0.159	0.521	17.3
30	0.195	0.641	14.1
50	0.254	0.833	10.8
88	0.340	1.12	8.08
100	0.364	1.19	7.56
108	0.378	1.24	7.26
150	0.449	1.47	6.12
174	0.486	1.59	5.66
200	0.523	1.72	5.26
300	0.649	2.13	4.24
400	0.758	2.49	3.63
450	0.808	2.65	3.41
500	0.855	2.81	3.22
512	0.866	2.84	3.17
600	0.945	3.10	2.91
700	1.03	3.37	2.67
800	1.11	3.63	2.48
824	1.13	3.69	2.44
894	1.18	3.87	2.34
960	1.23	4.02	2.24
1000	1.25	4.12	2.19
1250	1.42	4.67	1.93
1500	1.58	5.18	1.74
1700	1.70	5.56	1.62
1800	1.75	5.75	1.57
2000	1.86	6.11	1.48
2100	1.92	6.29	1.44
2200	1.97	6.46	1.40
2300	2.02	6.63	1.36
3000	2.37	7.76	1.16
3400	2.55	8.37	1.08
4000	2.81	9.23	0.978
5000	3.23	10.6	0.853

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.



7-16 DIN Female
L5PDF-RPC



7-16 DIN Male
L5PDM-RPC



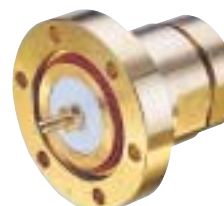
N Male
L5PNM-RPC



N Female
L5PNF-RPC



7/8" EIA Flange
L45R



F Flange Male
L45F

Connectors

Interface	Description	Type Number	Inner Contact Attachment	Outer Contact Attachment	Plating Code	Max. Length in (mm)	Max. Dia. in (mm)
N Male	OnePiece	L5PNM-RPC	Captivated	Self-Flare	SG	2.9 (74)	1.46 (37.2)
N Male	RingFlare	L5PNM-RC	Captivated	Self-Flare	SG	3.0 (76)	1.35 (34.3)
N Female	OnePiece	L5PNF-RPC	Captivated	Self-Flare	SG	2.7 (69)	1.46 (37.2)
N Female	RingFlare	L5PNF-RC	Captivated	Self-Flare	SG	2.9 (74)	1.35 (34.3)
7-16 DIN Male	OnePiece	L5PDM-RPC	Captivated	Self-Flare	SS	2.7 (69)	1.46 (37.2)
7-16 DIN Male	RingFlare	L5PDM-RC	Captivated	Self-Flare	SS	3.1 (79)	1.34 (34.0)
7-16 DIN Female	OnePiece	L5PDF-RPC	Captivated	Self-Flare	SS	2.33 (59.1)	1.46 (37.2)
7-16 DIN Female	RingFlare	L5PDF-RC	Captivated	RingFlare	SS	2.9 (74)	1.36 (34.5)
7-16 DIN Female	Panel Mount	L5PDF-PM	Self-Tapping	Self-Flare	SS	2.7 (69)	1.35 (34.4)
7-16 DIN Female	Bulkhead	L5PDF-BH	Self-Tapping	Self-Flare	SS	2.7 (69)	1.9 (48.3)
7-16 DIN Male	Right Angle	L5PDR	Self-Tapping	Self-Flare	SS	3.3/2.5 (85/64)	1.4 (35.6)
7/8" EIA Flange	-	L45R	Self-Tapping	Self-Flare	BB	3.3 (84)	2.25 (57)
7/8" EIA Flange	Right Angle	124800-1	Self-Tapping	Self-Flare	BB	3.9/1.3 (99/33)	2.25 (57)
F Flange Male	-	L45F	Self-Tapping	Self-Flare	BB	1.8 (46)	2.25 (57)
F Flange Female	-	48041	Self-Tapping	Self-Flare	BB	1.8 (46)	2.25 (57)
Splice	-	L45Z	Self-Tapping	Self-Flare	BB	3.3 (84)	1.5 (38)

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