

**LCF158-50JFNL**

1-5/8" CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable, Flame Retardant Jacket



CELLFLEX® Lite 1-5/8" low loss cable

Features / Benefits

- **It represents a light-weight transmission line solution**
The light weight of CELLFLEX® Lite coaxial cable results in reduced work-force and lifting gear.
- **It is easy to transport, handle and install**
CELLFLEX® Lite coaxial cables enable savings in shipping cost.
- **It exhibits a cost-efficient alternative to copper transmission line**
CELLFLEX® Lite coaxial cable helps to reduce CAPEX spending.
- **It offers a user-friendly compatibility with RFS's existing range of accessories**
CELLFLEX® Lite coaxial cable requires less inventory additions, thus reduced OPEX.
- **It enables trouble-free installation and operation**
CELLFLEX® Lite coaxial cable avoids downtime and reduces OPEX.
- **The attenuation is comparable to the industry standard in traditional cable**
CELLFLEX® Lite coaxial cable maintains uncompromised coverage.
- **Specially developed connectors exhibit low and stable intermodulation performance**
CELLFLEX® Lite coaxial cable exceeds present PIM standards ensuring no dropped calls.
- **It is available with UV-resistant polyethylene or flame-retardant jackets**
CELLFLEX® Lite coaxial cable can be used outside and in indoor applications where restrictions apply.
- **It exceeds industry standard for return loss performance**
CELLFLEX® Lite coaxial cable means zero risk in network planning.

Technical Features**STRUCTURE**

Cable Type	LCF
Size	1-5/8"
Jacket Option	Indoor
Inner Conductor Material	Corrugated Copper Tube
Dielectric Material	Foam Polyethylen
Outer Conductor Material	Corrugated Aluminium
Jacket Material	Black Polyethylen, Metalhydroxite Filling



LCF158-50JFNL

1-5/8" CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable, Flame Retardant Jacket

MECHANICAL SPECIFICATION

Inner Conductor Diameter	17.6mm (0.693in)
Dielectric Diameter	40.9mm (1.61in)
Outer Conductor Diameter	46.4mm (1.827in)
Jacket Diameter	50.2mm (1.976in)
Cable Weight	0.99kg/m (0.665lb/ft)
Min. Bending Radius, Single Bend	200mm (7.874in)
Min. Bending Radius, Repeated Bends	500mm (19.685in)
Bending Moment	40.7Nm (30.037ft-lbf)
Tensile Strength	2,100N (472.099lb)
Max. Pulling Length per Hoisting Grip	60m (2,362.205in)
Recommended Clamp Spacing	1.2m (3.937ft)
Max. Clamp Spacing	

ELECTRICAL SPECIFICATION

Impedance	50 ±1 Ω
Max. Operating Frequency	2.75 GHz
Velocity	90 %
Capacitance	74pF/m (22.555pF/ft)
Peak Power Rating	310 kW
RF Peak Voltage	5.6 kV
Jacket Spark	5 kV
DC-Resistance Inner Conductor	
DC-Resistance Outer Conductor	
Return Loss (VSWR) Performance	Standard 20dB (1.222) / Premium 23/24dB (1.152/1.135) on specified frequencies.

**LCF158-50JFNL**

1-5/8" CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable, Flame Retardant Jacket

TESTING AND ENVIRONMENTAL

Fire Performance	Flame Retardant, Halogen Free, Low Smoke
Compliance	RoHS 2011/65/EU China RoHS SJ/T 11364-2006 IEC 60754-1/-2 Halogen Acid Gases REACH (EC 1907/2006) IEC 60332-1 Single-Cable Flame Test IEC 61034-1, -2 Smoke Density Measurement
Phase Stabilized	Phase stabilized and phase matched cables are available upon request.
Installation Temperature, Minimum	-25°C (-13°F)
Installation Temperature, Maximum	60°C (140°F)
Storage Temperature, Minimum	-70°C (-94°F)
Storage Temperature, Maximum	85°C (185°F)
Operation Temperature, Minimum	
Operation Temperature, Maximum	85°C (185°F)

ATTENUATION AND POWER RATING

Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
75	0.61	0.19	19.18
100	0.71	0.22	16.51
150	0.88	0.27	13.34
200	1.02	0.31	11.46
450	1.58	0.48	7.41
700	2.01	0.61	5.81
800	2.17	0.66	5.39
870	2.27	0.69	5.14
900	2.32	0.71	5.05
960	2.40	0.73	4.87
1800	3.45	1.05	3.39
2000	3.67	1.12	3.19
2200	3.88	1.18	3.02
2400	4.08	1.25	2.87
2600	4.28	1.31	2.73
2700	4.38	1.34	2.67
2750	4.43	1.35	2.64
Note	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.		

NOTES

LCFXX-50JTC: TC cables (temperature cycled) are cables that are aged in order to reduce hysteresis effects. Available upon request.