CELLFLEX[®] Lite 7/8" low loss flexible cable

FEATURES / BENEFITS

Ultra Low Attenuation

The further reduced attenuation of CELLFLEX® premium attenuation coaxial cable results in extremly efficient signal transfer in your RF system, especially at high frequencies.

· Complete Shielding

The solid outer conductor of CELLFLEX® coaxial cable creates a continuous RFI/EMI shield that minimizes system interference.

· Low VSWR

Special low VSWR versions of CELLFLEX® coaxial cables contribute to low system noise.

· Outstanding Intermodulation Performance

CELLFLEX® coaxial cable's solid inner and outer conductors virtually eliminate intermods. Intermodulation performance is also confirmed with state-of-the-art equipment at the RFS factory.

· High Power Rating

Due to their low attenuation, outstanding heat transfer properties and temperature stabilized dielectric materials, CELLFLEX® cable provides safe long term operating life at high transmit power levels.

· Wide Range of Application

Typical areas of application are: feedlines for broadcast and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, and radio equipment interconnects.

Technical features

APPLICATIONS Applications

Аррисастопо		Main reed line, interlided for outdoor usage		
STRUCTURE				
Size		7/8		
Inner Conductor Diameter	mm (in)	9.05 (0.356)		
Inner Conductor Material		Copper Tube		
Dielectric Diameter	mm (in)	21.5 (0.846)		
Dielectric Material		Foam Polyethylene		
Outer Conductor Diameter	mm (in)	25.2 (0.992)		
Outer Conductor Material		Corrugated Aluminium Tube		
Jacket Diameter	mm (in)	27.8 (1.094)		
Jacket Material		Black Polyethylene		

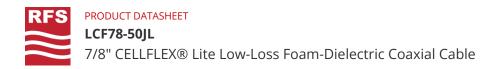
Main feed line, intended for outdoor usage

TESTING AND ENVIRONMENTAL

Fire Performance		Halogene Free	
Installation Temperature	°C(°F)	-40 to 60 (-40 to 140)	
Storage Temperature	°C (°F)	-70 to 85 (-94 to 185)	
Operation Temperature	°C(°F)	-50 to 85 (-58 to 185)	

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ELECTRICAL SPECIFICATIONS				
Impedance	Ω		50 +/- 1	
Maximum Frequency	GHz		5	
Velocity	%		90	
Capacitance	pF/m (pF/ft)		75 (22.9)	
Inductance	uH/m (uH/ft)		0.188 (0.057)	
Peak Power Rating	kW		85	
RF Peak Voltage	Volts	2920		
acket Spark	Volt RMS	8000		
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	2.04 (0.62)		
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	1.42 (0.43)		
Return Loss (VSWR) Performance		Standard 20dB (1.222) / Premium 23/24dB (1.152/1.135) on specified frequencies		
Phase Stabilized		Phase stabilized and phase matched cables and assemblies are available upon request.		
Temperature & Power	Standard			
MECHANICAL SPECIFICATIONS				
Cable Weight, Nominal	kg/m (lb/ft)	0.32 (0.215)		
Minimum Bending Radius, Single Bend	mm (in)	120 (5)		
Minimum Bending Radius, Repeated Bends	mm (in)	250 (10)		
Bending Moment	Nm (lb-ft)	13 (10)		
Tensile Strength	N (lb)	1440 (324)		
Recommended / Maximum Clamp Spacing	m (ft)	0.8 / 1 (2.75 / 3.25)		
ATTENUATION @ 20°C (68°F) AND I	POWER RATING	G @ 40°C (104°F)		
Frequency, MHz	dB per 100m		dB per 100ft	Power, kW
100		1.22	0.37	8.66
200	1.75		0.53	6.02
450	2.71		0.83	3.90
700	3.45		1.05	3.06
800	3.71		1.13	2.85
900		3.96	1.21	2.67
1800		5.86	1.79	1.80
2000		6.23	1.90	1.69
2200		6.59	2.01	1.60
2400		6.93	2.11	1.52
2700		7.43	2.26	1.42
3000		7.91	2.41	1.34
3500	8.67		2.64	1.22
4000		9.40	2.86	1.12
5000		10.77	3.28	0.98

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External Document Links	Notes	

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