1/4" CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable

CELLFLEX® 1/4" low loss flexible cable support CBRS, C-Band and LAA up to 6GHz FEATURES / BENEFITS

· Ultra Low Attenuation

The reduced attenuation of CELLFLEX® 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

External Document Links

Notes

CELLFLEX Drum Selection Guide

Technical features

INFORMATION					
Applications		OEM jumpers, BTS inter-cabinet connections, GPS lines, Microwave IF cabling, intended for outdoor usage			
STRUCTURE					
Size		1/4			
Inner Conductor Diameter	mm (in)	2.4 (0.094)			
Inner Conductor Material		Copper-Clad Aluminum Wire			
Dielectric Diameter	mm (in)	6 (0.236)			
Dielectric Material		Foam Polyethylene			
Outer Conductor Diameter	mm (in)	7.5 (0.295)			
Outer Conductor Material		Corrugated Copper			
Jacket Diameter	mm (in)	10 (0.394)			
Jacket Material		Black Polyethylene			

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Phase Stabilized		Phase stabilized and phase matched cables and accessories are available upon reques	
Compliance		DIN EN ISO 9001:2015 ISO 14001:2015 RoHS 2011/65/EU - China RoHS SJ/T 11364-2006 REACH (EC 1907/2006) UL1581 - UV Resistance Jacket IEC 60754-1/-2	
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)	
ELECTRICAL SPECIFICATIONS			
Impedance	Ω	50 +/- 1.5	
Maximum Frequency	GHz	15.8	
Velocity	%	83	
Capacitance	pF/m (pF/ft)	80 (24)	
Inductance	uH/m (uH/ft)	0.205 (0.063)	
Peak Power Rating	kW	10.9	
RF Peak Voltage	Volts	1050	
Jacket Spark	Volt RMS	5000	
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	6.1 (1.86)	
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	4.4 (1.34)	
Passive Intermodulation PIM	min. dBc	-160	
Return Loss (VSWR) Performance	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz		
MECHANICAL SPECIFICATIONS			
Cable Weight, Nominal	kg/m (lb/ft)	0.095 (0.064)	
Minimum Bending Radius, Single Bend	mm (in)	40 (1.575)	
Minimum Bending Radius, Repeated Bends	mm (in)	85 (3.346)	
Bending Moment	Nm (lb-ft)	1.9 (1.4)	
Tensile Strength	N (lb)	890 (200)	
Recommended / Maximum Clamp Spacing	m (ft)	0.5 / 1 (1.75 / 3.25)	

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		ATTENUATION @ 20°C (68°F) AND POWER RATING @ 40°C (104°F)					
requency, MHz	dB per 100m	dB per 100ft	Power, kW				
	0.41	0.13	17.68				
00	4.2	1.28	1.73				
00	6	1.83	1.21				
50	9.13	2.78	0.8				
00	11.52	3.51	0.63				
00	12.36	3.77	0.59				
00	13.16	4.01	0.55				
800	19.10	5.82	0.38				
000	20.22	6.17	0.36				
200	21.31	6.49	0.34				
400	22.35	6.81	0.33				
700	23.85	7.27	0.31				
000	25.28	7.7	0.29				
500	27.54	8.4	0.26				
000	29.68	9.05	0.25				
000	33.67	10.26	0.22				
5800	66.21	20.19	0.11				

RELATED PRODUCTS

Connector Interface	Premium Connector Series E01	Premium Connector Series D01 *only on request	
N Male	NM-LCF14-E01	NM-LCF14-D01	
N Female	NF-LCF14-E01	NF-LCF14-D01	
4.3-10 Male	43M-LCF14-E01		
Mandatory Tool	TRIM-SET-L14-D01		
Tool Information	Universal Trimming Tool For *-D01 And *-E01 Connector Series		
Installation Video			
General Accessories			
Hand Tool Kit	TRIM-T01		
Grounding Kit	GKSPEED20-14P		

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