

1/4" CELLFLEX Superflexible Foam-Dielectric Coaxial Cable

CELLFLEX® 1/4" superflexible 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, Main feed transitions to equipment, GPS lines, intended for outdoor usage	
STRUCTURE			
Size		1/4	
Inner Conductor Diameter	mm (in)	1.9 (0.075)	
Inner Conductor Material		Copper-Clad Aluminum Wire	
Dielectric Diameter	mm (in)	4.3 (0.169)	
Dielectric Material		Foam Polyethylene	
Outer Conductor Diameter	mm (in)	6.5 (0.256)	
Outer Conductor Material		Corrugated Copper	
Jacket Diameter	mm (in)	7.8 (0.307)	
Jacket Material		Black Polyethylene	

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Phase Stabilized		Phase stabilized and phase matched cables and accessories are available upon request.	
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	
Maximum Frequency	GHz	20.4	
Velocity	%	81	
Capacitance	pF/m (pF/ft)	82 (25)	
Inductance	uH/m (uH/ft)	0.207 (0.063)	
Peak Power Rating	kW	5.5	
RF Peak Voltage	Volts	740	
Jacket Spark	Volt RMS	5000	
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	10.5 (3.2)	
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	9 (2.75)	
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)	0.06 (0.04)	
Minimum Bending Radius, Repeated Bends	mm (in)	25 (0.984)	
Bending Moment	Nm (lb-ft)	0.7 (0.5)	
Tensile Strength	N (lb)	600 (135)	
Recommended / Maximum Clamp Spacing	m (ft)	0.2 / 0.2 (0.67 / 0.67)	

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Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
1	0.57	0.17	11.65
00	5.82	1.77	1.14
200	8.33	2.54	0.79
450	12.73	3.88	0.52
700	16.10	4.91	0.41
800	17.29	5.27	0.38
900	18.42	5.62	0.36
1800	26.90	8.2	0.25
2000	28.51	8.69	0.23
2200	30.07	9.17	0.22
2400	31.57	9.62	0.21
2700	33.73	10.28	0.20
3000	35.80	10.91	0.18
3500	39.09	11.92	0.17
4000	42.2	12.86	0.16
5000	48.03	14.64	0.14
20400	113.49	34.60	0.06

RELATED PRODUCTS

Connector Interface	Standard Connector Series E01	Premium Connector Series D01 / 001 *only on request		
N Male	NM-SCF14-E01	NM-SCF14-D01		
N Female	NF-SCF14-E01	NF-SCF14-D01		
4.3-10 Male	43M-SCF14-E01			
7/16 Male	716M-SCF14-E01	716M-SCF14-001		
Mandatory Tool	TRIM-SET-S14-D01			
Tool Information	Universal Trimming Tool For *-D01 And *-E01 Connector Series			
Installation Video				
General Accessories				
Hand Tool Kit	TRIM-T01			
Grounding Kit	EAR-14-S			

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