



## 3/8" CELLFLEX® Superflexible Foam-Dielectric Coaxial Cable

CELLFLEX® 3/8" superflexible cable

### FEATURES / BENEFITS

- ➔ **Low Attenuation**  
The low attenuation of CELLFLEX® coaxial cable results in highly efficient signal transfer in your RF system.
- ➔ **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.



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### Technical Features

#### APPLICATIONS

Applications	OEM jumpers, BTS inter-cabinet connections, GPS lines
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#### STRUCTURE

Cable Type		Foam-Dielectric, Superflexible
Size		3/8"
Jacket Option		Black
Inner Conductor	mm (in)	2.6 (0.1) Copper-Clad Aluminum Wire
Dielectric	mm (in)	6.3 (0.25) Foam Polyethylene
Outer Conductor	mm (in)	9.1 (0.36) Corrugated Copper
Jacket	mm (in)	10.2 (0.4) Polyethylene, PE

#### ELECTRICAL SPECIFICATIONS

Impedance	Ω	50 +/- 1
Maximum Frequency	GHz	13.4
Velocity	%	82
Capacitance	pF/m (pF/ft)	82 (25)
Inductance	μH/m (μH/ft)	0.207 (0.063)
Peak Power Rating	kW	11.9
RF Peak Voltage	Volts	1090
Jacket Spark	Volt RMS	5000
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	5.3 (1.62)
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	5.6 (1.71)
Return Loss (VSWR) Performance		Standard
Maximum Return Loss	dB (VSWR)	Contact RFS for your VSWR performance specification for your required frequency band.
Phase Stabilized		Phase stabilized and phase matched cables and assemblies are available upon request.
Temperature & Power		Standard

#### MECHANICAL SPECIFICATIONS

Cable Weight	kg/m (lb/ft)	0.12 (0.08)
Minimum Bending Radius, Repeated Bends	mm (in)	25 (1)
Bending Moment	Nm (lb*ft)	1.4 (1)
Tensile Strength	N (lb)	600 (135)
Recommended / Maximum Clamp Spacing	m (ft)	0.25 / 0.25 (0.8 / 0.8)



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### ATTENUATION AND POWER RATING

Frequency MHz	Attenuation		Power kW
	dB/100m	dB/100ft	
0.5	0.29	0.089	11.90
1	0.41	0.126	11.90
1.5	0.51	0.154	11.90
2	0.58	0.178	11.90
10	1.31	0.40	6.02
20	1.86	0.567	4.24
30	2.28	0.696	3.46
50	2.96	0.903	2.67
88	3.95	1.20	2.00
100	4.22	1.29	1.87
108	4.39	1.34	1.80
150	5.20	1.58	1.52
174	5.61	1.71	1.41
200	6.03	1.84	1.31
300	7.45	2.27	1.06
400	8.66	2.64	0.912
450	9.22	2.81	0.857
500	9.74	2.97	0.81
512	9.87	3.01	0.80
600	10.70	3.27	0.736
700	11.60	3.55	0.678
800	12.50	3.81	0.631
824	12.70	3.87	0.621
894	13.30	4.05	0.595
900	13.30	4.06	0.593
925	13.50	4.12	0.584
960	13.80	4.20	0.572
1000	14.10	4.30	0.56
1250	15.90	4.85	0.496
1500	17.60	5.36	0.449
1700	18.80	5.74	0.42
1800	19.40	5.92	0.407
2000	20.60	6.27	0.384
2100	21.10	6.45	0.373
2200	21.70	6.61	0.364
2400	22.80	6.94	0.347
3000	25.80	7.87	0.306
3500	28.20	8.59	0.28
4000	30.40	9.27	0.26
5000	34.60	10.50	0.228
6000	38.40	11.70	0.205
7000	42.10	12.80	0.188
8000	45.60	13.90	0.173
9000	48.90	14.90	0.161
10000	52.10	15.90	0.152
12000	58.20	17.70	0.136
13400	62.30	19.00	0.127

Attenuation at 20°C (68°F) cable temperature;  
tolerance +/- 5% max.; Mean power rating at  
40°C (104°F) ambient temperature

### TESTING AND ENVIRONMENTAL

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

### External Document Links

### Notes

Phase stabilized versions available upon request.