



Cable Type	
Standard PE jacket	CR 1070 PE
Fire Retardant, Riser Rated, CATVR	CR 1070 R
Fire Retardant, Riser Rated, Non-Halogen	CR 1070 NHR

Cable Characteristics

Electrical	
Impedance, Ohms	50 ± 1
Cutoff Frequency, GHz	5.0
Velocity %	88
Peak Power Rating, kW	108
DC Resistance, Ohms/1000 ft (1000m)	
Inner	0.63 (2.07)
Outer	0.36 (1.18)
DC Breakdown, Volts	6000
Jacket Spark, Volts RMS	8000
Capacitance, pF/ft (pF/m)	23.0 (75.5)
Inductance, μH/ft (μH/m)	0.058 (0.19)

VSWR Specification	
30-2500 MHz	1.10:1 (26.4dB)

DTF Specification (at minimum bend radius)	
30-2500 MHz	1.006 (50.0dB)

Mechanical	
Jacket	PE or riser rated CMR/CATVR
Outer Conductor	Copper
Inner Conductor	Copper
Inner Conductor Dia., in. (mm)	.399 (10.13)
Dia. Over Dielectric, in. (mm)	1.05 (26.7)
Dia. Over Outer Conductor, in. (mm)	1.07 (27.2)
Dia. Over Outer Jacket, in. (mm)	1.170 (29.7)
Minimum Bend Radius, in. (mm)	8.0 (203)
Number of Bends	15
Bending Moment, ft-lbs. (Nm)	49 (66)
Cable Weight, lbs/ft (kg/m)	0.36 (0.54)
Tensile Strength, lbs. (Kg)	900 (408)
Flat Plate Crush Strength, lbs./in. (kg/mm)	210 (3.8)

Standard Conditions:

- For Attenuation, VSWR 1.0 ambient temperature 20° (68°F), atmospheric pressure, dry air.
- For Average Power, VSWR 1.0, inner temperature 100° (212°F), ambient temperature 40° (104°F), atmospheric pressure, dry air, no solar loading.
- Specifications subject to change without notice.

Nominal Attenuation and Average Power**

Frequency Mhz	Attenuation		Average Power kW
	dB/100 ft	dB/100m	
100	0.317	1.04	8.45
108	0.329	1.08	8.20
150	0.391	1.28	6.85
174	0.425	1.39	6.26
200	0.459	1.51	5.88
300	0.568	1.86	4.63
400	0.665	2.18	3.90
450	0.710	2.33	3.65
500	0.754	2.47	3.42
512	0.762	2.50	3.34
600	0.834	2.74	3.06
700	0.910	2.99	2.80
800	0.979	3.21	2.58
824	0.997	3.27	2.54
894	1.04	3.42	2.43
960	1.09	3.57	2.33
1000	1.11	3.66	2.28
1700	1.52	4.99	1.68
1800	1.58	5.17	1.66
1900	1.63	5.35	1.63
2000	1.68	5.51	1.54
2200	1.77	5.81	1.45
2300	1.83	6.01	1.41
2400	1.89	6.20	1.37
2500	1.95	6.39	1.34
3000	2.15	7.04	1.21
4000	2.57	8.43	1.02
5000	3.00	9.84	0.887

1070 (7/8") Connectors and Assemblies

All Cell Reach connectors are premium quality. The two piece construction is designed for quick and consistent termination while maintaining superior performance. Termination craftsmanship issues are reduced to a minimum by using a Cell Reach self gauging coring tool.

Brass is used as the connector body base material. Surfaces in the RF transmission path are silver plated. All other surfaces are nickel/tin coated. Insulators are made of polypropylene, polytetrafluorethylene (PTFE), polycarbonate and Delrin. All O-rings are made of ethylene propylene rubber (EPDM) to ensure the tightest seal against moisture ingress.



N-Male



N-Female



7/16 DIN-Male



7/16 DIN-Female

Insertion Loss, dB-Formula

$$.05 \sqrt{F, \text{GHz}}$$

Intermodulation-3rd Order Product-dBm (dBc)

> 112 (155) (Two +43 dBm carriers, 1M product
between 1870-1910 MHz)

Product No.	Interface	Maximum Length		Maximum Diameter	
		inches	(mm)	inches	(mm)
1070 ANM	N-Male	2.70	(68.8)	1.677	(42.6)
1070 ANF	N-Female	2.70	(68.8)	1.677	(42.6)
1070 ADM	7/16 DIN-Male	2.70	(68.8)	1.677	(42.6)
1070 ADF	7/16 DIN-Female	2.70	(68.8)	1.677	(42.6)

1070 Cable Runs with Installed Connectors Guaranteed Low VSWR Specifications, Type CR 1070

Frequency MHz	Assembly VSWR, Maximum (RL, dB)					Connectors	Application
	1-25 ft.	26-100 ft.	101-200 ft.	201-500 ft.	> 500 ft.		
	(.5-7.5m)	(7.6-30.5m)	(30.6-61m)	(61.2-152.4m)	(> 152.4m)		
824-960	1.06 (30.7)	1.07 (29.4)	1.08 (28.3)	1.10 (26.4)	1.10 (26.4)	ANF, ANM, ADF, ADM	Cellular
824-960 1700-1900	1.10 (26.4)	1.12 (24.9)	1.13 (24.2)	1.15 (23.1)	1.15 (23.1)	ANF, ANM, ADF, ADM	PCS
1700-2000	1.08 (28.3)	1.08 (28.3)	1.10 (26.4)	1.10 (26.4)	1.10 (26.4)	ANF, ANM, ADF, ADM	PCS
1900-2200	1.10 (26.4)	1.10 (26.4)	1.10 (26.4)	1.12 (24.9)	1.15 (23.1)	ANF, ANM, ADF, ADM	GSM
2200-2500	1.10 (26.4)	1.10 (26.4)	1.12 (24.9)	1.12 (24.9)	1.15 (23.1)	ANF, ANM, ADF, ADM	UMTS

VSWR values are guaranteed for factory fit assemblies only.

Note: Tools and Accessories, pages: 40-45