

## 1/2" Aluminum Plenum Rated Coax

### CS-F12PAR500

Air Dielectric Coax, Aluminum Plenum Rated Red Jacket



#### Electrical Specifications

Product Model	CS-F12PAR500	
Size	500 ft/spool	
Spool size	22.8"x22.8"x21.7"	
Frequency (MHz)	DC-6000	
Impedance (ohm)	50.0 ± 1.0	
Capacitance	79.46 (pF/m), 23.0 (pF/ft)	
Inductance	0.19(μH/m), 0.058 (μH/ft)	
Propagation Velocity (%)	88	
DC Breakdown Voltage (KV)	4.0	
Insulation Resistance (MΩ)	> 5,000	
Peak Power Rating (kW)	40.0	
Cut-off Frequency (GHz)	8.8	
VSWR. typical	555-2200MHz	1.15
	2300-2700MHz	1.15
	3300-4200MHz	1.20
	4400-6000MHz	1.25

#### Mechanical Specifications

Diameter Over Inner Conductor (in/mm)	0.189/ 4.80
Diameter Over Insulation (in/mm)	0.465 / 11.80
Diameter Over Outer Conductor (in/mm)	0.543 / 13.80
Diameter Over Jacket (in/mm)	0.630/ 16.00
Minimum Bending Radius-Single (in/mm)	2.5 / 63.5
Minimum Bending Radius-Multiple (in/mm)	5.0 / 127
Shipping Dimension (in/mm)	22.8x 22.8x21.7 / 580.0x580.0x550.0
Shipping Weight(lb./kg)	140.0 / 63.5

#### Environment

Application	Indoor / Outdoor
Storage Temperature	-10°C to +85°C
Operating Temperature	-10°C to +85°C
Installation Temperature	-5°C to +60°C

#### Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
50	1.82	0.55	2100	12.54	3.82
100	2.29	0.70	2200	12.91	3.93
150	2.75	0.84	2300	13.27	4.04
174	2.96	0.90	2400	13.62	4.15
300	3.99	1.22	2500	13.98	4.26
340	4.29	1.31	2600	14.32	4.37
400	4.73	1.44	2700	14.67	4.47
450	5.07	1.55	2800	15.01	4.57
500	5.40	1.65	2900	15.34	4.68
600	6.02	1.83	3000	15.67	4.78
617	6.12	1.87	3100	16.00	4.88
698	6.58	2.01	3200	16.32	4.97
800	7.13	2.17	3300	16.64	5.07
894	7.61	2.32	3550	17.41	5.31
960	7.93	2.42	3600	17.56	5.35
1000	8.12	2.47	3700	17.86	5.44
1200	9.02	2.75	3800	18.16	5.53
1400	9.86	3.00	3900	18.45	5.62
1500	10.26	3.13	4000	18.74	5.71
1698	11.03	3.36	4100	19.04	5.80
1700	11.04	3.37	4200	19.33	5.89
1800	11.42	3.48	5000	21.68	6.61
1900	11.80	3.60	5500	23.16	7.06
2000	12.17	3.71	6000	24.42	7.44

Note: Typical attenuation at ambient temperature +20°C (68°F)

#### Material

Inner Conductor	Copper Clad Aluminum Wire
Insulation	PE Spline
Outer Conductor	Ring Corrugated Copper
Jacket	PVC, Red Plenum Rated Jacket
Hanger Block	HB-F12
Prep Tool	AP-F12
Associated Connectors	N-Male; CN-NM-F12 N-Female; CN-NF-F12 4.3-10-Male; CN-4M-F12 4.3-10-Female; CN-4F-F12

#### Compliance & Certification

Certification	Plenum Rated. CMP ETL UL-444/CSA C22.2NO214
RoHS	Compliant