

DATASHEET

CS-F38PL Series

DS-Control: 1-O-1 / 260908

3/8" Aluminum Plenum Rated Coax

CS-F38PLA / CS-F38PLB

CS-F38PLA500 / CS-F38PLB500

Air Dielectric Coax, Aluminum Plenum Rated, White Jacket



Electrical Specifications

Product Model	CS-F38PLA500 CS-F38PLB500	CS-F38PLA CS-F38PLB	CS-F38PL
Size	500 ft/spool	1,000 ft/spool	1,000 ft/spool
Spool size	18.1"x18.1"x12.6"	21.7" x 21.7"x16.5"	21.7" x 21.7"x16.5"
Ordering	CS-F38PLA500 for label A CS-F38PLB500 for label B	CS-F38PLA for label A CS-F38PLB for label B	CS-F38PL will be shipped either CS-F38PLA or CS-F38PLB
Frequency (MHz)	DC-6000		
Impedance (ohm)	50.0 ± 2.0		
Capacitance	79.5 (pF/m), 24.2 (pF/ft)		
Inductance	0.20(μH/m), 0.061 (μH/ft)		
Propagation Velocity (%)	81		
DC Breakdown Voltage (KV)	2.5		
Insulation Resistance (MΩ)	> 10,000		
Peak Power Rating (kW)	13.2		
Cut-off Frequency (GHz)	6		
VSWR. typical	130-2700MHz 3300-4200MHz 4400-6000MHz	1.20 1.25 1.35	

Mechanical Specifications

Diameter Over Inner Conductor (in/mm)	0.128 / 3.26
Diameter Over Insulation (in/mm)	0.327 / 8.30
Diameter Over Outer Conductor (in/mm)	0.394 / 10.0
Diameter Over Jacket (in/mm)	0.445 / 11.3
Minimum Bending Radius-Single (in/mm)	0.984 / 25.0
Minimum Bending Radius-Multiple (in/mm)	1.969 / 50.0
Shipping Dimension (in/mm)	21.7x21.7x16.5 / 550x550x420@1,000 ft 18.1x18.1x12.6 / 460x460x320@500 ft
Shipping Weight(lb./kg)	118.0 / 53.5 @ 1,000 ft 59.2 / 26.9 @500 ft

Material

Inner Conductor	Copper Clad Aluminum Wire
Insulation	PE Spline
Outer Conductor	Helical Corrugated Aluminum
Jacket	White Plenum Rated Jacket
Hanger Block	HB-F38D for dual cable
Prep Tool	AP-F38 for N-type and 4.3-10
Associated Connectors*	N-Male; CN-NM-F38L, CN-NM-F38 N-Female; CN-NF-F38L, CN-NF-F38 4.3-10-Male; CN-4M-F38L, CN-4M-F38 4.3-10-Female; CN-4F-F38L, CN-4F-F38

Note*: The connectors are compatible for both CS-F38 and CS-F38PL series Coax.

Environment

Application	Indoor / Outdoor
Storage Temperature	-20°C to +80°C
Operating Temperature	-20°C to +80°C
Installation Temperature	-5°C to +60°C

Compliance & Certification

Certification	Plenum Rated. CMP ETL UL-444/CSA C22.2NO214 FT6
RoHS	Compliant

Attenuation**

Frequency	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency	Attenuation (dB/100m)	Attenuation (dB/100ft)
50	5.77	1.76	2100	23.45	7.15
100	6.32	1.93	2170	23.90	7.29
138	6.74	2.05	2200	24.09	7.34
150	6.87	2.09	2300	24.72	7.53
174	7.13	2.17	2400	25.33	7.72
300	8.47	2.58	2500	25.92	7.90
450	10.01	3.05	2600	26.50	8.08
520	10.71	3.26	2700	27.06	8.25
617	11.66	3.55	2800	27.62	8.42
698	12.43	3.79	3000	28.68	8.74
800	13.38	4.08	3200	29.70	9.05
850	13.83	4.22	3300	30.19	9.20
894	14.23	4.34	3400	30.67	9.35
960	14.81	4.52	3550	31.38	9.56
1000	15.16	4.62	3600	31.61	9.63
1200	16.86	5.14	3700	32.07	9.77
1500	19.24	5.86	3800	32.52	9.91
1698	20.70	6.31	3900	32.96	10.05
1700	20.72	6.31	4000	33.40	10.18
1800	21.43	6.53	4200	34.25	10.44
1900	22.12	6.74	5000	37.52	11.44
2000	22.80	6.95	6000	41.65	12.69

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