

PLAC50FR-78CB

7/8"R Low Loss Coaxial Cable

PROSE

- 7/8" Foam Insulation Low Loss Coaxial Cable
- Corrugated aluminium outer conductor
- Black flame retardant polyolefin jacket
- Recommended operating frequency: 1~5000 MHz
- This product is used for telecommunication system
- Indoor application, flame retardant, low smoke, halogen free



Photo for reference

Material

Inner conductor material	Smooth copper tube
Dielectric material	Foam PE
Outer conductor material	Corrugated aluminium (Annularly)
Jacket material	Flame retardant polyolefin, Black, Halogen free

Dimensions

Nominal size	7/8" Low Loss
Inner conductor OD.	Ø 9.4 mm
Dielectric OD.	Ø 22.5 mm
Outer conductor OD.	Ø 25.4 mm
Jacket OD.	Ø 27.8 mm

Reference standard

Flame retardant property	IEC 60332-1-2, IEC 60754-1/-2, IEC 61034-2
--------------------------	---

Electrical Specification

Impedance	50 ± 1 Ω
Relative Velocity of Propagation	88 %
Capacitance	74 pF/m
Inductance	0.185 µH/m
Maximum Operating Frequency	5.1 GHz
Cut-off Frequency	5.1 GHz
Peak Power Rating	88 kW

Insulation Resistance	$\geq 10 \text{ G}\Omega \times \text{km}$
DC Breakdown Voltage	10000 V
Jacket Spark Test Voltage	8000 Vrms

Environmental Specification

Installation Temperature	-30°C to +60°C
Operating Temperature	-40°C to +85°C
Storage Temperature	-50°C to +85°C
RoHS	Compliant

Standard Conditions

Attenuation, Ambient Temperature	20°C
Average Power, Ambient Temperature	40°C
Average Power, Inner Conductor Temp	100°C

Mechanical Specification

Tensile strength	1450 N
Min. bending radius (single)	120 mm
Min. bending radius (repeated)	250 mm
Number of bends, minimum (typical)	12 (25)
Bending moment	18 Nm
Recommended hanger spacing	1.0 m

Return Loss

Return loss(Band A)	$\leq -24\text{dB}$ 800 to 1000MHz
Return loss(Band B)	$\leq -24\text{dB}$ 1700 to 2700MHz
Return loss(Band C)	$\leq -20\text{dB}$ 3300 to 3900MHz
Return loss(Band D)	$\leq -17.7\text{dB}$ 4800 to 5000MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power(kW)
100	1.22	8.41
200	1.75	5.89
300	2.25	4.58
400	2.60	3.96

PLAC50FR-78CB

7/8”R Low Loss Coaxial Cable



450	2.70	3.87
800	3.67	2.85
900	3.89	2.68
1000	4.12	2.53
1800	5.78	1.84
2000	6.08	1.74
2200	6.46	1.65
2500	6.85	1.54
2700	7.50	1.47
3000	7.69	1.39
3500	8.63	1.27
3600	8.78	1.24
3800	9.03	1.21
4000	9.31	1.18
4500	9.98	1.10
4800	10.37	1.05
5000	10.60	1.03

*Maximum attenuation value shall be 105% of the nominal attenuation value.

Marking on cable

PROSE _ PLAC50FR-78CB _ 50Ω _ _ _ _ _ (DD+MM+SS+YY+NNNNN) _ _ _ _ _ XXXXm

Remark1: Printing Interval: 1m, within $\pm 0.5\%$ accuracy.

Remark2: (DD+MM+SS+YY+NNNNN) means cable code.

Remark3: XXXXm means cable meter.

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.