

PFC50FR-14CB

1/4"R Coaxial Cable

PROSE

- 1/4" Foam Insulation Coaxial Cable
- Corrugated copper outer conductor
- Black flame retardant polyolefin jacket
- Recommended operating frequency: 1~6000 MHz
- This product is used for telecommunication system
- Indoor application, flame retardant, low smoke, halogen free



Photo for reference

Material

Inner conductor material	Copper-Clad Aluminium Wire
Dielectric material	Foam PE
Outer conductor material	Corrugated copper(Annularly)
Jacket material	Flame retardant polyolefin, Black, Halogen free

Dimensions

Nominal size	1/4"
Inner conductor OD.	Ø 2.6 mm
Dielectric OD.	Ø 6.8 mm
Outer conductor OD.	Ø 7.7 mm
Jacket OD.	Ø 9.0 mm

Reference standard

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

Impedance	50 ± 1 Ω
Relative Velocity of Propagation	85 %
Capacitance	78 pF/m
Inductance	0.195 µH/m
Maximum Operating Frequency	15.0 GHz
Cut-off Frequency	18.6 GHz
Peak Power Rating	11 kW
Insulation Resistance	≥ 10 GΩx km

DC Breakdown Voltage	2000 V
Jacket Spark Test Voltage	5000 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	530 N
Min. bending radius (single)	50 mm
Min. bending radius (repeated)	120 mm
Number of bends, minimum (typical)	15 (50)
Bending moment	2 Nm
Recommended hanger spacing	0.6 m

Return Loss

Return loss(Band A)	≤ -26.0 dB 800 to 1000MHz
Return loss(Band B)	≤ -24.0 dB 1700 to 2200MHz
Return loss(Band C)	≤ -24.0 dB 2200 to 2700MHz
Return loss(Band D)	≤ -21.0 dB 3300 to 4000MHz
Return loss(Band E)	≤ -20.8 dB 4800 to 5000MHz
Return loss(Band F)	≤ -17.69 dB 5000 to 6000MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power(kW)
100	4.80	1.75
200	6.50	1.23
300	8.00	1.00

400	9.00	0.87
450	9.14	0.80
800	12.7	0.59
900	13.3	0.55
1000	14.1	0.54
1800	19.5	0.38
2000	20.6	0.36
2200	21.8	0.34
2500	23.4	0.33
2700	24.7	0.32
3000	26.1	0.30
3500	28.0	0.27
3600	28.6	0.26
3800	29.8	0.25
4000	31.0	0.24
5000	36.8	0.21
6000	40.0	0.18

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

Marking on cable

PROSE _ PFC50FR-14CB _ 50Ω _ _ _ _ _ (DD+MM+SS+YY+NNNNN) _ _ _ _ _ XXXXm
Remark1: Printing Interval: 1m, within ±0.5% accuracy.
Remark2: (DD+MM+SS+YY+NNNNN) means cable code.
Remark3: XXXXm means cable meter.

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