

# PFC50FR-78A

## 7/8"R Coaxial Cable

**PROSE**

- 7/8" Foam Insulation Coaxial Cable
- Corrugated copper outer conductor
- Black flame retardant polyolefin jacket
- Recommended operating frequency: 1~4000 MHz
- This product is used for telecommunication system



Photo for reference

### Material

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

### Dimensions

Nominal size	7/8"
Inner conductor OD.	Ø 9.0 mm
Dielectric OD.	Ø 22.4 mm
Outer conductor OD.	Ø 24.9 mm
Jacket OD.	Ø 27.5 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	88 %
Capacitance	76 pF/m
Inductance	0.19 μH/m
Maximum Operating Frequency	5.0 GHz
Cut-off Frequency	5.2 GHz
Peak Power Rating	91 kW
Insulation Resistance	≥ 10 GΩx km
DC Breakdown Voltage	10000 V
Jacket Spark Test Voltage	8000 Vrms

## Environmental Specification

Installation Temperature	-20°C to +60°C
Operating Temperature	-40°C to +85°C
Storage Temperature	-70°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)	15 (50)
Bending moment	18 Nm
Recommended hanger spacing	1.0 m

## Return Loss

Return loss(Band A)	≤ -26dB 800 to 1000MHz
Return loss(Band B)	≤ -24dB 1700 to 1900MHz
Return loss(Band C)	≤ -24dB 1900 to 2200MHz
Return loss(Band D)	≤ -24dB 2200 to 2700MHz
Return loss(Band E)	≤ -21dB 3300 to 4000MHz

## Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power(kW)
100	1.17	9.17
200	1.69	6.27
300	2.11	4.51
400	2.48	3.97
450	2.64	3.73
700	3.40	2.65
800	3.63	2.48

900	3.86	2.34
1000	4.12	2.19
1800	5.75	1.73
2000	6.11	1.63
2100	6.29	1.52
2200	6.46	1.40
2500	6.95	1.33
2700	7.28	1.25
3000	7.75	1.16
3500	8.35	1.05
3600	8.47	1.03
3800	8.77	1.01
4000	9.09	0.99
*Maximum attenuation value shall be 105% of the nominal attenuation value.		

## Marking on cable

Prose _ PFC50FR-78A _ 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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