

PSC50FR-14CB

1/4" S Coaxial Cable

PROSE

- 1/4" Foam Insulation Super Flexible 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 Aluminum Wire
Dielectric material	Foam PE
Outer conductor material	Corrugated copper(Helical)
Jacket material	Flame retardant polyolefin, Black, Halogen free

Dimensions

Nominal size	1/4" Super flexible
Inner conductor OD.	Ø 1.9 mm
Dielectric OD.	Ø 4.85 mm
Outer conductor OD.	Ø 6.35 mm
Jacket OD.	Ø 7.5 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	83 %
Capacitance	80 pF/m
Inductance	0.19 µH/m
Maximum Operating Frequency	20.4 GHz
Cut-off Frequency	20.4 GHz
Peak Power Rating	3.94 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	500 N
Min. bending radius (single)	25 mm
Min. bending radius (repeated)	45 mm
Number of bends, minimum (typical)	15 (50)
Bending moment	1.5 Nm
Recommended hanger spacing	0.6 m

Return Loss

Return loss(Band A)	≤ -26dB 800 to 1000MHz
Return loss(Band B)	≤ -24dB 1700 to 2700MHz
Return loss(Band C)	≤ -21dB 3300 to 4200MHz
Return loss(Band D)	≤ -20.8dB 4400 to 5000MHz
Return loss(Band E)	≤ -17.69dB 5000 to 6000MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power(kW)
100	5.95	1.14
200	8.36	0.79
300	10.3	0.64
400	12.4	0.56

450	13.1	0.52
800	17.5	0.39
900	18.5	0.36
1000	19.6	0.34
1800	26.9	0.25
2000	28.5	0.23
2200	30.2	0.22
2500	32.3	0.21
2700	33.7	0.20
3000	35.7	0.19
3500	39.1	0.18
3600	39.8	0.18
3800	40.9	0.17
4000	42.2	0.16
4200	43.5	0.15
5000	48.0	0.14
6000	53.4	0.12

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

Marking on cable

PROSE _ PSC50FR-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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