

PSC50FR-12CB

1/2" S Coaxial Cable

PROSE

- 1/2" 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	1/2" Super flexible
Inner conductor OD.	Ø 3.6 mm
Dielectric OD.	Ø 9.4 mm
Outer conductor OD.	Ø 12.0 mm
Jacket OD.	Ø 13.3 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	81 %
Capacitance	80 pF/m
Inductance	0.195 μH/m
Maximum Operating Frequency	10.2 GHz
Cut-off Frequency	12.5 GHz
Peak Power Rating	16 kW
Insulation Resistance	≥ 10 GΩ x km

DC Breakdown Voltage	2500 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	750 N
Min. bending radius (single)	25 mm
Min. bending radius (repeated)	35 mm
Number of bends, minimum (typical)	20 (50)
Bending moment	3 Nm
Recommended hanger spacing	0.8 m

Return Loss

Return loss(Band A)	≤ -26dB 800 to 1000MHz
Return loss(Band B)	≤ -24dB 1700 to 2700MHz
Return loss(Band C)	≤ -23dB 3300 to 4000MHz
Return loss(Band D)	≤ -20.8dB 4800 to 5000MHz
Return loss(Band E)	≤ -17.69dB 5000 to 6000MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power(kW)
100	3.31	3.16
200	4.84	2.17
300	5.90	1.71
400	6.80	1.47

450	7.20	1.38
800	10.20	1.01
900	10.70	0.95
1000	11.30	0.89
1800	15.60	0.63
2000	16.00	0.60
2200	17.30	0.56
2500	18.60	0.52
2700	19.70	0.50
3000	21.00	0.48
3500	22.10	0.46
3600	22.50	0.44
3800	23.00	0.42
4000	24.00	0.40
5000	26.80	0.37
6000	29.80	0.33

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

Marking on cable

PROSE _ PSC50FR-12CB _ 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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