

Product Specification

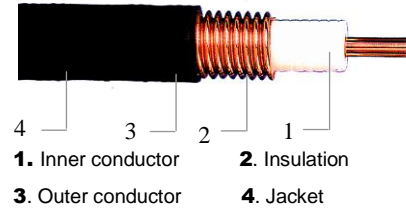


Part No.	3110501	Issue No.	1
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1/2" S Super-flexible physically foamed insulation coaxial cable

RF50 1/2" S

Item	Description	
HANSEN type No.	RF50 12S	
HANSEN part No.	3110501	
HUAWEI part No.	25070076	
Construction		
Inner Conductor	Material	Copper clad aluminum wire
	Diameter, mm	3.55±0.04
Insulation	Material	Physically foamed PE
	Diameter, mm	9.20±0.20
	Concentric ratio, %	≥96
Outer conductor	Material	Helically corrugated copper
	Top, mm	12.00±0.20
	Bottom, mm	9.00±0.30
	Pitch, mm	3.00±0.15
	Thickness, mm	0.20±0.02
Jacket	Material	Polyethylene(PE)
	Min. thickness, mm	>0.50
	Diameter, mm	13.60±0.20
Reference weight ,kg/km	196	
Mechanical properties		
Bending radius, mm	Single	17
	Repeated	30
	Moving	200
Pulling strength, N	800	
Crush resistance, N/mm	19.6	
Bending moment, N•m	2.7	
Storage temperature, °C	-55~+85	
Installation temperature, °C	-40~+60	
Operation temperature, °C	-55~+85	
Electrical properties		
Inner conductor DC resistance, Ω /km	2.90	
Outer conductor DC resistance, Ω /km	4.30	
Impedance, Ω	50 ± 1	
Inductance, μH/m	0.205	
Capacitance, pF/m	82	
Propagation velocity, %	83	
DC breakdown voltage, kV	2.5	
Insulation resistance, MΩ •km	>5 × 10 ³	
Peak power, kW	15.6	
IM3, dBm	≤-115	
Screening attenuation, dB	>>120	
Cut-off frequency, GHz	10.2	



Attenuation and average power		
Frequency , MHz	Nom. attenuation @20°C, dB/100m	Power rate @40°C, kW
450	7.25	1.38
800	9.80	1.01
894	10.40	0.94
1000	10.90	0.89
1800	15.10	0.63
2000	15.90	0.60
2200	16.90	0.57
2500	18.10	0.53
2700	19.00	0.50
3500	22.00	0.42
5000	27.00	0.34
6000	30.00	0.31

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

VSWR	
400~1000MHz	≤1.08
1600~2700MHz	≤1.12
3200~5800MHz	≤1.30

Sunlight aging	
Aged (300h)	Jacket tensile strength variety ratio:±15%
	Jacket elongation variety ratio:±15%
Aged (720h)	Jacket tensile strength variety ratio:±20%
	Jacket elongation variety ratio:±20%

Double 85(85°C ± 2°C, 85% ± 5%, 1000h)

No any evidence of cracking or slitting on jacket

Marking
Comply with 25070076 Huawei specification

Other
Comply with YD/T 1092

RoHS
Comply with the RoHS Directive 2011/65/Eu and its Subsequent amendments.