



**DATA SHEET**  
**HPL 50-1/4SF**  
Black Polyethylene Jacket

**AST**  
**M2929**  
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- 1 - Inner Conductor** : Copper -clad Aluminium  
Diameter :1.90 ± 0.05 mm
  - 2 - Dielectric** : Foam Polyethylene  
Diameter : 4.40 ± 0.20 mm  
Eccentricity : < 2%
  - 3 - Outer Conductor** : Helically corrugated copper tube  
Diameter over outer conductor : 6.40 ± 0.20 mm  
Diameter inside bottom : 4.30 ± 0.15 mm  
Section length : 2.70 ± 0.05 mm
  - 4 - Jacket** : Black Polyethylene  
Diameter : 7.70 ± 0.20 mm
  - 5 - Ink marking** : Metric length
- ACOME HYPERCELL COAX HPL 50-1/4SF SUPER FLEXIBLE M2929 LOT X lot N°**



**Mechanical Characteristics**

Packaging : 500 meters  
Halogen content : IEC754-1  
Installation temperature range : -25°C / + 60°C  
Operating temperature range : -40°C / + 85°C  
Weight approx : 75 kg/km

Installation Bending radius : 25 mm - Min.  
Operating Bending radius : 45 mm - Min.  
Tensile Strength : 500 N-Max  
Bending moment at 90° :2.5 Nm

**Electrical Characteristics**

Impedance : 50 ± 1 Ω  
Capacitance : 80 ± 1.5 pF/m  
Intermodulation IM3 (GSM-UMTS) maxi : -158 dBc (-163 dBc typical)  
Velocity : 83%, Dielectric constant : 1.48, typical values  
Screening effectiveness : > 120 dB

Operating frequency : 18 GHz  
Peak power rating : 3.94 kW  
Operating voltage : 0.6 kV RMS  
Test voltage : 1.3 kV RMS  
Insulation Resistance : > 10000 MΩ.km  
DC resistance : Inner conductor : ≤ 9.78 Ω/km  
: Outer conductor : ≤ 6.90 Ω/km

*Test methods are meeting the requirements of :*

IEC60096-0-1,IEC61196-1,IEC60966-1

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
30	3.16	3.13
80	5.21	1.89
150	7.19	1.37
450	12.75	0.77
824	17.58	0.56
900	18.44	0.54
960	19.09	0.52
1000	19.53	0.50
1500	24.34	0.40
1700	26.05	0.38
1800	26.93	0.37
1900	27.70	0.36

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	28.52	0.35
2200	30.05	0.33
2300	30.79	0.32
2400	31.50	0.31
2500	32.27	0.30
3000	35.69	0.277
3300	37.73	0.262
3400	38.36	0.258
3500	39.02	0.25
3600	39.63	0.24
3800	40.86	0.23

*This technical specification is for reference only and is subject to change without notice*

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