



DATA SHEET
HPL 50-1-1/4F
 Black Polyethylene Jacket

AST
M2937
 Page: 1/1

- 1 - Inner Conductor** : Copper tube
Diameter : 13.0 ± 0.10 mm
 - 2 - Dielectric** : Foam Polyethylene
Diameter : 32.20 ± 0.20 mm
Eccentricity : < 4%
 - 3 - Outer Conductor** : Annularly corrugated copper tube
Diameter over outer conductor : 35.70 ± 0.30 mm
Diameter outside bottom : 32.50 ± 0.30 mm
Section length : 8.0 ± 0.20 mm
 - 4 - Jacket** : Black Polyethylene
Diameter : 39.5 ± 0.50 mm
 - 5 - Ink marking** : Metric length
- ACOME HYPERCELL COAX HPL 50-1-1/4 FLEXIBLE M2937 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 : 927kg/km
 Installation Bending radius : 200 mm - Min.
 Operating Bending radius : 380 mm - Min.
 Tensile Strength : 2500 N - Max.

Electrical Characteristics

Impedance : 50 ± 1Ω
 Capacitance : 75.5 ± 1.5 pF/m
 Intermodulation IM3 (GSM-UMTS) maxi : -158 dBc (-163 dBc typical)
 Velocity : 88%, Dielectric constant : 1.32, typical values
 Screening effectiveness : > 120 dB

Operating frequency : 3 GHz
 Peak power rating : 181 kW
 Operating voltage : 4.3 kV RMS
 Test voltage : 8 kV RMS
 Insulation Resistance : > 10000 MΩ.km
 DC resistance : Inner conductor : ≤ 0.85Ω /km
 : Outer conductor : ≤ 0.66Ω /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	0.43	23.68
80	0.72	14.13
150	1.00	10.07
450	1.83	5.46
824	2.56	3.84
900	2.69	3.64
960	2.79	3.50
1000	2.85	3.42
1500	3.61	2.75
1700	3.89	2.47
1800	4.03	2.38
1900	4.16	2.30

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	4.28	2.23
2200	4.54	2.10
2300	4.67	2.04
2400	4.79	1.98
2500	4.92	1.93
3000	5.49	1.72
3300	5.82	1.61
3400	5.92	1.58

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

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