



**DATA SHEET**  
**HPL 50-3/8F**  
Black Polyethylene Jacket

**AST**  
**M2934**  
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- 1 - Inner Conductor** : Copper-clad Aluminium  
Diameter :  $3.30 \pm 0.05$  mm
  - 2 - Dielectric** : Foam Polyethylene  
  
Diameter :  $8.30 \pm 0.20$  mm  
Eccentricity : < 2%
  - 3 - Outer Conductor** : Annularly corrugated copper tube  
Diameter over outer conductor :  $9.50 \pm 0.20$  mm  
Diameter outside bottom :  $8.60 \pm 0.20$  mm  
Section length :  $4.0 \pm 0.05$  mm
  - 4 - Jacket** : Black Polyethylene  
Diameter :  $11.50 \pm 0.30$  mm
  - 5 - Ink marking** : Metric length
- ACOME HYPERCELL COAX HPL 50-3/8 FLEXIBLE M2934 LOT X lot N°**



**Mechanical Characteristics**

Packaging : 500 meters  
Halogen content : IEC754-1  
Installation temperature range :  $-25^{\circ}\text{C} / + 60^{\circ}\text{C}$   
Operating temperature range :  $-40^{\circ}\text{C} / + 85^{\circ}\text{C}$

Weight approx : 130kg/km  
Installation Bending radius : 50 mm - Min.  
Operating Bending radius : 100 mm - Min.  
Tensile Strength : 700 N - Max.

**Electrical Characteristics**

Impedance :  $50 \pm 1\Omega$   
Capacitance :  $78 \pm 1.5$  pF/m  
Intermodulation IM3 (GSM-UMTS) maxi : -158 dBc (-163 dBc typical)  
Velocity : 85%, Dielectric constant : 1.38, typical values  
Screening effectiveness : > 120 dB

Operating frequency : 12 GHz  
Peak power rating : 12.8 kW  
Operating voltage : 1.13 kV RMS  
Test voltage : 2.3 kV RMS  
Insulation Resistance : > 10000 M $\Omega$ .km  
DC resistance : Inner conductor :  $\leq 3.46\Omega / \text{km}$   
: Outer conductor :  $\leq 3.50\Omega / \text{km}$

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	1.74	5.68
80	2.85	3.46
150	3.93	2.51
450	6.91	1.43
824	9.47	1.04
900	9.92	0.99
960	10.26	0.96
1000	10.48	0.94
1500	12.99	0.76
1700	13.89	0.71
1800	14.32	0.69
1900	14.74	0.67

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	15.15	0.65
2200	15.95	0.62
2300	16.33	0.60
2400	16.71	0.59
2500	17.08	0.58
3000	18.86	0.52
3300	19.86	0.5
3400	20.19	0.49
3500	20.51	0.48
3600	20.83	0.47
3800	21.46	0.45

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

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