



# DATA SHEET

## HPL 50-3/8F HFR

**AST**  
**M5310**

High Fire resistant Low smoke Zero Halogen Jacket

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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 High Fire resistant Low smoke Zero Halogen Compound  
Diameter :  $11.50 \pm 0.30$  mm
- 5 - Ink marking** : Metric length



**ACOME HYPERCELL COAX LSOH HFR HPL 50-3/8 FLEXIBLE M5310 LOT lot N°**

### Mechanical & Environmental Characteristics

Packaging : 500 meters  
Weight approx : 149kg/km  
Fire resistance : IEC332-1/332-3A/UL1666/NFC32070.2.2/RATP K26  
Smoke toxicity : IEC754-2/NFC20-454  
Smoke density : IEC1034

Installation Bending radius : 50 mm - Min.  
Operating Bending radius : 100 mm - Min.  
Tensile Strength : 700 N - Max.  
Installation temperature range :  $-20^{\circ}\text{C} / + 60^{\circ}\text{C}$   
Operating temperature range :  $-40^{\circ}\text{C} / + 85^{\circ}\text{C}$

### Electrical Characteristics

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

Max 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-A mbient 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-A mbient 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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