



# DATA SHEET

## HPL 50-1/2SF

AST  
M2830

Fire resistant Low smoke Zero Halogen Jacket

Page: 1/1

- 1 - Inner Conductor** : Copper -clad Aluminium  
Diameter : $3.60 \pm 0.05$  mm
- 2 - Dielectric** : Foam Polyethylene  
Diameter :  $9.0 \pm 0.10$  mm  
Eccentricity : < 2%
- 3 - Outer Conductor** : Helically corrugated copper tube  
Diameter over outer conductor :  $12.10 \pm 0.15$  mm  
Diameter inside bottom :  $8.75 \pm 0.15$  mm  
Section length :  $3.0 \pm 0.15$  mm
- 4 - Jacket** : Low smoke Zero Halogen Compound  
Diameter :  $13.40 \pm 0.20$  mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX LSOH HPL 50-1/2 SUPER FLEXIBLE M2830 LOT X lot N°

### Mechanical Characteristics

Packaging : 500 meters  
Weight approx : 198kg/km  
Fire resistance : IEC332-1/332-3A  
Smoke toxicity : IEC754-2/NFC20-454  
Smoke density : IEC1034

Installation Bending radius : 25 mm - Min.  
Operating Bending radius : 50 mm - Min.  
Tensile Strength : 700 N  
Bending moment at 90° : 4.4 Nm  
Installation temperature range : -20°C / + 60°C  
Operating temperature range : -40°C / + 85°C

### 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 : 10 GHz  
Peak power rating : 16 kW  
Operating voltage : 1.27 kV RMS  
Test voltage : 2.6 kV RMS  
Insulation Resistance : > 10000 M $\Omega$ .km  
DC resistance : Inner conductor :  $\leq 2.90 \Omega / \text{km}$   
: Outer conductor :  $\leq 3.67 \Omega / \text{km}$

*Test methods are meeting the requirements of :*

*IEC 60096-0-1, IEC61196-1, IEC60966-1*

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
30	1.77	5.58
80	2.92	3.38
150	4.03	2.45
450	7.15	1.38
824	9.86	1.00
900	10.34	0.95
960	10.71	0.92
1000	10.95	0.90
1500	13.65	0.72
1700	14.62	0.67
1800	15.09	0.65
1900	15.55	0.63

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	16.00	0.61
2200	16.87	0.58
2300	17.29	0.56
2400	17.71	0.55
2500	18.12	0.54
3000	20.12	0.49
3300	21.20	0.47
3400	21.56	0.46
3500	21.92	0.45
3600	22.28	0.43
3800	22.98	0.41

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

Edition :2009-07-15