



DATA SHEET

HPL 50-1/2F

Black Polyethylene Jacket

AST
M1473
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- 1 - Inner Conductor** : Copper –clad Aluminium
Diameter : 4.80 ± 0.05 mm
- 2 - Dielectric** : Foam Polyethylene
Diameter : 11.90 ± 0.20 mm
Eccentricity : < 2%
- 3 - Outer Conductor** : Annularly corrugated copper tube
Diameter over outer conductor : 13.70 ± 0.20 mm
Diameter outside bottom : 12.10 ± 0.20 mm
Section length : 5.0 ± 0.15 mm
- 4 - Jacket** : Black Polyethylene
Diameter : 16.0 ± 0.30 mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX HPL 50-1/2 FLEXIBLE M1473 LOT X lot N°

Mechanical Characteristics

Packaging : 250 meters or 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 : 224kg/km
Installation Bending radius : 70 mm - Min.
Operating Bending radius : 125 mm - Min.
Tensile Strength : 1100 N - Max.

Electrical Characteristics

Impedance : $50 \pm 1 \Omega$
Capacitance : 76.5 ± 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 : 8 GHz
Peak power rating : 40 kW
Operating voltage : 1.6 kV RMS
Test voltage : 3.3 kV RMS
Insulation Resistance : > 10000 M Ω .km
DC resistance : Inner conductor : $\leq 1.60 \Omega / \text{km}$
: Outer conductor : $\leq 2.16 \Omega / \text{km}$

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	1.18	8.35
80	1.95	5.06
150	2.69	3.67
450	4.76	2.07
824	6.56	1.50
900	6.88	1.43
960	7.12	1.39
1000	7.28	1.35
1500	9.07	1.09
1700	9.71	1.02
1800	10.02	0.98
1900	10.32	0.95

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	10.62	0.93
2200	11.19	0.88
2300	11.47	0.85
2400	11.75	0.84
2500	12.02	0.82
3000	13.34	0.74
3300	14.06	0.70
3400	14.28	0.69
3500	14.52	0.68
3600	14.75	0.64
3800	15.21	0.62

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

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