



DATA SHEET
HPL 50-1/2SF
Black Polyethylene Jacket

AST
M2839
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- 1 - Inner Conductor** : Copper -clad Aluminium
Diameter : 3.60 ± 0.05 mm
- 2 - Dielectric** : Foam Polyethylene

Diameter : 9.0 ± 0.10 mm
Eccentricity : < 2%
- 3 - Outer Conductor** : Helically corrugated copper tube
Diameter over outer conductor : 12.10 ± 0.15 mm
Diameter inside bottom : 8.75 ± 0.15 mm
Section length : 3.0 ± 0.15 mm
- 4 - Jacket** : Black Polyethylene
Diameter : 13.40 ± 0.20 mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX HPL 50-1/2 SUPER FLEXIBLE M2839 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 : 181kg/km

Installation Bending radius : 25 mm - Min.
Operating Bending radius : 50 mm - Min.
Tensile Strength : 700 N
Bending moment at 90° : 4.4 Nm

Electrical Characteristics

Impedance : $50 \pm 1\Omega$
Capacitance : 78 ± 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 Ω .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 :

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	1.77	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

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