



DATA SHEET

HPL 50-7/8 F

Black Polyethylene Jacket

AST
M5423F
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- 1 - Inner Conductor** : Copper tube
Outer Diameter : 9.0 ± 0.10 mm
- 2 - Dielectric** : Foam Polyethylene
Diameter : 22.0 ± 0.20 mm
Eccentricity : < 2%
- 3 - Outer Conductor** : Annularly corrugated copper tube
Diameter over outer conductor : 24.70 ± 0.20 mm
Diameter outside bottom : 22.0 ± 0.20 mm
Section length : 7.0 ± 0.15 mm
- 4 - Jacket** : Black Polyethylene
Diameter : 27.40 ± 0.25 mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX HPL 50-7/8 FLEXIBLE M5423 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 : 446kg/km
Installation Bending radius : 120 mm - Min.
Operating Bending radius : 250 mm - Min.
Tensile Strength : 1400 N - Max.

Electrical Characteristics

Impedance : 50 ± 1
Capacitance : 76.5 ± 1.5 pF/m
Return Loss : **maxi -26.5 dB** from 806 to 960 MHz
maxi -24 dB from 1710 to 2200 MHz
Intermodulation IM3 (GSM-UMTS) maxi : -158 dBc (-163 dBc typical)
Velocity : 88%, Dielectric constant : 1.32, typical values

Screening effectiveness : > 120 dB
Operating frequency : 5 GHz
Peak power rating : 90 kW
Operating voltage : 3 kV RMS
Test voltage : 6 kV RMS
Insulation Resistance : > 10000 M Ω .km
DC resistance : Inner conductor : $\leq 1.55 \Omega/\text{km}$
: Outer conductor : $\leq 1.30 \Omega/\text{km}$

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	0.62	15.92
80	1.03	9.58
150	1.43	6.88
450	2.57	3.80
824	3.56	2.71
900	3.74	2.58
960	3.87	2.49
1000	3.98	2.43
1500	5.00	1.92
1700	5.33	1.79
1800	5.52	1.73
1900	5.73	1.67

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	5.90	1.62
2200	6.25	1.53
2300	6.42	1.48
2400	6.57	1.44
2500	6.76	1.42
3000	7.53	1.28
3300	8.01	1.18
3400	8.16	1.17
3500	8.29	1.15
3600	8.45	1.12
3800	8.75	1.09

Edition :2009-06-12