



DATA SHEET

HPL 50-7/8 F

Fire resistant Low smoke Zero Halogen Jacket

AST
M5425
Page: 1/1

- 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** : Low smoke Zero Halogen Compound
Diameter : 27.40 ± 0.25 mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX LSOH HPL 50-7/8 FLEXIBLE M5425 LOT X lot N°

Mechanical Characteristics

Packaging : 500 meters
Weight approx : 512kg/km
Fire resistance : IEC332-1/332-3A
Smoke toxicity : IEC754-2/NFC20-454
Smoke density : IEC1034

Installation Bending radius : 120 mm - Min.
Operating Bending radius : 250 mm - Min.
Installation temperature range : $-20^{\circ}\text{C} / + 60^{\circ}\text{C}$
Operating temperature range : $-40^{\circ}\text{C} / + 85^{\circ}\text{C}$
Tensile Strength : 1400 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 : 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 :

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	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

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

Edition :2009-07-12