



DATA SHEET

HPL 50-1/4SF HFR

High Fire resistant Low smoke Zero Halogen Jacket

AST

M5302

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- 1 - Inner Conductor** : Copper - clad Aluminium
Diameter: 1.90 ± 0.05 mm
- 2 - Dielectric** : Foam Polyethylene
Diameter : 4.40 ± 0.20 mm
Eccentricity : < 2%
- 3 - Outer Conductor** : Helically corrugated copper tube
Diameter over outer conductor : 6.40 ± 0.20 mm
Diameter inside bottom : 4.30 ± 0.15 mm
Section length : 2.70 ± 0.05 mm
- 4 - Jacket** : Black High Fire resistant Low smoke Zero Halogen Compound
Diameter : 7.95 ± 0.15 mm
- 5 - Ink marking** : Metric length



ACOME HPL 50-1/4SF LSOH HFR M5302 UL CATVR 13AWG 75°C LOT lot N°

Mechanical & Environmental Characteristics

Packaging : 500 meters
 Fire resistance : IEC332-1 / IEC332-3A / UL 1666/ NFC 32070.2.2 / R ATP K26
 Smoke toxicity : IEC 754-2 / NF C20-454
 Smoke density : IEC1034
 Weight approx : 84kg/km

Installation Bending radius : 25 mm - Min.
 Operating Bending radius : 45 mm - Min.

Tensile Strength : 500 N-Max
 Bending moment at 90° : 2.5 Nm
 Installation temperature range : -20°C / + 60°C
 Operating temperature range : -40°C / + 85°C

Electrical Characteristics

Impedance : $50 \pm 1\Omega$
 Capacitance : 80 ± 1.5 pF/m
 Intermodulation IM3 (GSM-UMTS) maxi : -158 dBc (-163 dBc typical)
 Velocity : 83%, Dielectric constant : 1.48, typical values
 Screening effectiveness : > 120 dB

Max Operating frequency : 18 GHz
 Peak power rating : 3.94 kW
 Operating voltage : 0.6 kV RMS
 Test voltage : 1.3 kV RMS
 Insulation Resistance : > 10000 MΩ.km
 DC resistance : Inner conductor : $\leq 9.78\Omega$ /km
 : Outer conductor : $\leq 6.90\Omega$ /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	3,16	3,13
80	5,21	1,89
150	7,19	1,37
450	12,75	0,77
824	17,58	0,56
900	18,44	0,54
960	19,09	0,52
1000	19,53	0,50
1500	24,34	0,40
1700	26,05	0,38
1800	26,93	0,37
1900	27,70	0,36

Frequency MHz	Attenuation db/100m @ 20°C Typical	Power kW @ 40°C-Ambient Temp Inner conductor : 100°C
2000	28,52	0,35
2200	30,05	0,33
2300	30,79	0,32
2400	31,50	0,31
2500	32,27	0,30
3000	35,69	0,277
3300	37,73	0,262
3400	38,36	0,258
3500	39,02	0,25
3600	39,63	0,24
3800	40,86	0,23

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

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