



M5407Z HYPERCELL

HPL 50-7/8 LA - Black Polyethylene Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper tube Outer Diameter: 9.25 mm
Dielectric:	Foam Polyethylene Diameter: 22.4 mm
Outer Conductor:	Corrugated copper Outer Diameter: 24.7 mm
Jacket:	Black Polyethylene Diameter: 27.4 mm

Ink marking: ACOME HYPERCELL COAX HPL 50-7/8 LA M5407 LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:

- Operating : 250 mm - Min
- Installation : 120 mm - Min

Tensile Strength: 1450 N - Max

Weight: 431 kg/km

Packaging: 500 m

ENVIRONMENTAL

Temperature range:

- Operating: -40°C / +85°C
- Installation: -25°C / +60°C
- Storage: -70°C / +85°C

Halogen content: IEC 60754-1

Test methods: IEC 60096-0-1, 61196-1, 60966-1

ELECTRICAL

Impedance : $50 \pm 1 \Omega$

Return loss :

- 400 ~ 500 MHz ≤ -26.5 dB
- 800 ~ 1000 MHz ≤ -26.5 dB
- 1700 ~ 2200 MHz ≤ -24 dB
- 2500 ~ 2700 MHz ≤ -23.5 dB

Capacitance: 73.5 pF/m

Passive Intermodulation : ≤ -158 dBc

Velocity: 90%

Dielectric constant: 1.23

Screening effectiveness: > 120 dB

Operating frequency: ≤ 5 GHz

Peak power rating: 95 kW

Operating voltage: 3 kV RMS

Insulation Resistance: > 10000 M Ω .km

DC resistance:

- Inner conductor: $\leq 1.55 \Omega/\text{km}$
- Outer conductor: $\leq 1.40 \Omega/\text{km}$

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	0.59	16.29
80	0.98	9.85
150	1.37	7.10
450	2.45	3.97
824	3.42	2.86
900	3.56	2.72
960	3.73	2.63
1000	3.78	2.57
1500	4.74	2.04
1700	5.17	1.91
1800	5.25	1.84
1900	5.41	1.79
2000	5.58	1.70
2200	5.89	1.65
2300	6.04	1.60
2400	6.19	1.56
2500	6.34	1.53
3000	7.06	1.37
3300	7.46	1.29
3400	7.60	1.26
3500	7.73	1.25
3600	7.86	1.22
3800	8.12	1.18
5000	9.69	0.90