



M2930Z HYPERCELL

HPL 50-1/4 F - Black Polyethylene Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper - clad Aluminium Diameter: 2.5 mm
Dielectric:	Foam Polyethylene Diameter: 6.6 mm
Outer Conductor:	Corrugated copper Outer Diameter: 7.6 mm
Jacket:	Black Polyethylene Diameter: 9.5 mm

Ink marking: ACOME HYPERCELL COAX HPL 50-1/4F FLEXIBLE M2930 LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:

- Operating : 100 mm – Min
- Installation : 40 mm – Min

Tensile Strength: 560 N – Max

Weight: 99 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: 78.5 pF/m

Passive Intermodulation : ≤ -158 dBc

Velocity: 85%

Dielectric constant: 1.38

Screening effectiveness: > 120 dB

Operating frequency: ≤ 15 GHz

Peak power rating: 7.5 kW

Operating voltage: 0.87 kV RMS

Insulation Resistance: > 10000 M Ω .km

DC resistance:

- Inner conductor: $\leq 6.05 \Omega/\text{km}$
- Outer conductor: $\leq 4.45 \Omega/\text{km}$

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	2.25	4.38
80	3.71	2.66
150	5.14	1.92
450	9.14	1.08
824	12.64	0.78
900	13.26	0.74
960	13.74	0.72
1000	14.04	0.70
1500	17.55	0.56
1700	18.81	0.52
1800	19.42	0.51
1900	20.02	0.49
2000	20.60	0.4879
2200	21.75	0.45
2300	22.30	0.44
2400	22.83	0.43
2500	23.36	0.42
3000	25.92	0.378
3300	27.38	0.358
3400	27.86	0.355
3500	28.33	0.35
3600	28.80	0.34
3800	29.71	0.32