



M2931Z HYPERCELL

HPL 50-1/4 SF - Fire resistant LSOH Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper - clad Aluminium Diameter: 1.9 mm
Dielectric:	Foam Polyethylene Diameter: 4.5 mm
Outer Conductor:	Corrugated copper Outer Diameter: 6.4 mm
Jacket:	Low smoke Zero Halogen Compound Diameter: 7.7 mm

Ink marking: ACOME HYPERCELL COAX LSOH HPL 50-1/4SF SUPER FLEXIBLE M2931 LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:

- Operating : 45 mm - Min
- Installation : 25 mm - Min

Tensile Strength: 500 N - Max

Weight: 80 kg/km

Packaging: 500 m

ENVIRONMENTAL

Temperature range:

- Operating: -40°C / +85°C
- Installation: -20°C / +60°C
- Storage: -70°C / +85°C

Fire resistance: IEC 60332-1 / 60332-3C

Smoke toxicity: IEC 60754-2 / NFC20-454

Smoke density: IEC 61034

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: 80 pF/m

Passive Intermodulation : ≤ -158 dBc

Velocity: 83%

Dielectric constant: 1.48

Screening effectiveness: > 120 dB

Operating frequency: ≤ 18 GHz

Peak power rating: 3.94 kW

Operating voltage: 0.6 kV RMS

Insulation Resistance: > 10000 M Ω .km

DC resistance:

- Inner conductor: ≤ 9.78 Ω /km
- Outer conductor: ≤ 6.90 Ω /km

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature 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
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
5000	47.63	0.15
5700	51.36	0.13
10000	71.41	0.09
11000	75.60	0.08