



## 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  $\leq -26.5$  dB
- 800 ~ 1000 MHz  $\leq -26.5$  dB
- 1700 ~ 2200 MHz  $\leq -24$  dB
- 2500 ~ 2700 MHz  $\leq -23.5$  dB

Capacitance: 78.5 pF/m

Passive Intermodulation :  $\leq -158$  dBc

Velocity: 85%

Dielectric constant: 1.38

Screening effectiveness:  $> 120$  dB

Operating frequency:  $\leq 15$  GHz

Peak power rating: 7.5 kW

Operating voltage: 0.87 kV RMS

Insulation Resistance:  $> 10000$  M $\Omega$ .km

DC resistance:

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

| Frequency<br>(MHz) | Attenuation<br>(dB/100m)<br>@ 20°C<br>Typical | Power kW<br>@ 40°C-Ambient<br>Temperature<br>Inner conductor:<br>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                                                                   |