



M2932Z HYPERCELL

HPL 50-1/4 F - Fire resistant LSOH 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 LSOH HPL 50-1/4F FLEXIBLE M2932 LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:

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

Tensile Strength: 560 N - Max

Weight: 112 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 / 60332-3A

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: 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 |