

M5422Z
HYPERCELL

HPL 50-7/8 LA - Fire resistant LSOH 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:	Low smoke Zero Halogen Compound Diameter: 27.4 mm

Ink marking: ACOME HYPERCELL COAX LSOH HPL 50-7/8 LA M5422 LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:

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

Tensile Strength: 1450 N – Max

Weight: 501 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: 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 ± 1 Ω
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 MΩ.km
DC resistance:

- Inner conductor: ≤ 1.55 Ω/km
- Outer conductor: ≤ 1.40 Ω/km

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	1.77	5.58
80	2.92	3.38
150	4.03	2.45
450	7.15	1.38
824	9.86	1.00
900	10.34	0.95
960	10.71	0.92
1000	10.95	0.90
1500	13.65	0.72
1700	14.62	0.67
1800	15.09	0.65
1900	15.55	0.63
2000	16.00	0.61
2200	16.87	0.58
2300	17.29	0.56
2400	17.71	0.55
2500	18.12	0.54
3000	20.12	0.49
3300	21.20	0.47
3400	21.56	0.46
3500	21.92	0.45
3600	22.28	0.43
3800	22.98	0.41
5000	9.69	0.90