

M5436Z
HYPERCELL

HPL 50-7/8F ALU – 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 Aluminium Diameter over outer conductor: 25.1 mm
Jacket:	Low smoke Zero Halogen Compound Diameter: 27.4 mm

Marking (Metric): ACOME HYPERCELL COAX LSOH HPL 50-7/8F ALU M5436 LOT X lot No. XXXXm

MECHANICAL

Bending radius:

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

Tensile Strength: 1400 N – Max

Weight: 394 kg/km

ENVIRONMENTAL

Temperature range:

- Operating: -40°C / +85°C
- Installation: -25°C / +60°C
- Storage: -70°C / +85°C

Fire Resistance: 60332-1 / 60332-3A

Smoke Toxicity: IEC 60754-2

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: 74 pF/m
Passive Intermodulation : ≤-163 dBc
Velocity: 90%
Dielectric constant: 1.23
Screening effectiveness: > 120 dB
Operating frequency: ≤ 5 GHz
Cut-off frequency: 5.3 GHz
Peak power rating: 90 kW
Operating voltage: 3 kV RMS
Insulation Resistance: > 10000 MΩ.km
DC resistance:

- Inner conductor: ≤ 1.60 Ω/km
- Outer conductor: ≤ 2.40 Ω/km

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	0.67	13.56
80	1.09	8.17
150	1.51	5.89
450	2.70	3.24
824	3.76	2.30
900	3.93	2.20
960	4.09	2.10
1000	4.16	2.07
1500	5.21	1.62
1700	5.58	1.50
1800	5.76	1.46
1900	5.94	1.40
2000	6.10	1.36
2200	6.43	1.29
2300	6.59	1.25
2400	6.75	1.22
2500	6.90	1.19
3000	7.64	1.06
3300	8.08	1.00
3400	8.21	0.98
3500	8.33	0.96
3600	8.46	0.94
3800	8.75	0.91