



M5438Z HYPERCELL

HPL 50-1-5/8 LA - Fire resistant LSOH Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper tube Outer Diameter: 17.7 mm
Dielectric:	Foam Polyethylene Diameter: 42.4 mm
Outer Conductor:	Corrugated copper Outer Diameter: 46.4 mm
Jacket:	Low smoke Zero Halogen Compound Diameter: 50.0 mm

Ink marking: ACOME HYPERCELL COAX LSOH HPL 50-1-5/8F FLEXIBLE M2940 LOT X lot N (+ Metric length)

MECHANICAL

Bending radius:

- Operating : 500 mm - Min
- Installation : 300 mm - Min

Tensile Strength: 2400 N - Max

Weight: 1215 kg/km

Packaging: 340 or 500 m

ENVIRONMENTAL

Temperature range:

- Operating: -40°C / +85°C
- Installation: -25°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

Capacitance: 75 pF/m

Passive Intermodulation : ≤ -158 dBc

Velocity: 90%

Dielectric constant: 1.23

Screening effectiveness: > 120 dB

Operating frequency: ≤ 2.7 GHz

Peak power rating: 306 kW

Operating voltage: 5.4 kV RMS

Insulation Resistance: > 10000 M Ω .km

DC resistance:

- Inner conductor: $\leq 1.42 \Omega/\text{km}$
- Outer conductor: $\leq 0.65 \Omega/\text{km}$

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	0.36	27.03
80	0.59	16.21
150	0.83	11.61
450	1.47	6.37
800	2.02	4.59
824	2.06	4.51
900	2.16	4.29
960	2.25	4.13
1000	2.28	4.03
1500	2.87	3.36
1700	3.09	2.94
1800	3.17	2.85
1900	3.30	2.75
2000	3.37	2.67
2200	3.58	2.52
2300	3.67	2.45
2400	3.76	2.36
2500	3.83	2.32
2700	4.01	2.15

RANGE

AST-M5438Z