



M5306Z HYPERCELL

HPL 50-3/8 SF - High Fire resistant LSOH Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper - clad Aluminium Diameter:	2.8 mm
Dielectric:	Foam Polyethylene Diameter:	6.9 mm
Outer Conductor:	Corrugated copper Outer Diameter:	9.6 mm
Jacket:	Black High Fire resistant Low smoke Zero Halogen Compound Diameter:	11.15 mm

Ink marking: ACOME HPL 50-3/8SF LSOH HFR M5306 (UL) E352156 CATVR 10AWG 75°C LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:	Operating	45 mm - Min
	Installation	25 mm - Min
Tensile Strength:		500 N - Max
Weight:		147 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:	UL 1666	
Smoke toxicity:	IEC 60754-2	
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: 80 pF/m

Passive Intermodulation : ≤ -158 dBc

Velocity: 83%

Dielectric constant: 1.45

Screening effectiveness: > 120 dB

Operating frequency: ≤ 12 GHz

Peak power rating: 8.6 kW

Operating voltage: 0.9 kV RMS

Insulation Resistance: > 10000 M Ω .km

DC resistance:

- Inner conductor: $\leq 4.76 \Omega/\text{km}$
- Outer conductor: $\leq 4.95 \Omega/\text{km}$

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	2.27	3.06
80	3.75	1.88
150	5.16	1.36
450	9.14	0.78
824	12.60	0.56
900	13.20	0.54
960	13.62	0.53
1000	13.90	0.52
1500	17.35	0.42
1700	18.60	0.39
1800	19.20	0.37
1900	19.76	0.36
2000	20.30	0.35
2200	21.40	0.33
2300	21.95	0.32
2400	22.48	0.316
2500	23.0	0.31
3000	25.47	0.28
3300	26.90	0.26
3400	27.34	0.25
3500	27.79	0.24
3600	28.24	0.23
3800	29.18	0.21