

M5302Z

HPL 50-1/4 SF - High Fire resistant LSOH Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper - clad Aluminium Diameter:	1.9 mm
Dielectric:	Foam Polyethylene Diameter:	4.5 mm
Outer Conductor:	Corrugated copper Outer Diameter:	6.4 mm
Jacket:	Black High Fire resistant Low smoke Zero Halogen Compound Diameter:	7.95 mm

Ink marking: ACOME HPL 50-1/4SF LSOH HFR M5302 (UL) E352156 CATVR 13AWG 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:		85 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 ± 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: 80 pF/m
Passive Intermodulation : ≤-158 dBc
Velocity: 83%
Dielectric constant: 1.48
Screening effectiveness: > 120 dB
Operating frequency: ≤ 18 GHz
Peak power rating: 3.94 kW
Operating voltage: 0.6 kV RMS
Insulation Resistance: > 10000 MΩ.km
DC resistance:

- Inner conductor: ≤ 9.78 Ω/km
- Outer conductor: ≤ 6.90 Ω/km

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	3.16	3.13
80	5.21	1.89
150	7.19	1.37
450	12.75	0.77
824	17.58	0.56
900	18.44	0.54
960	19.09	0.52
1000	19.53	0.50
1500	24.34	0.40
1700	26.05	0.38
1800	26.93	0.37
1900	27.70	0.36
2000	28.52	0.35
2200	30.05	0.33
2300	30.79	0.32
2400	31.50	0.31
2500	32.27	0.30
3000	35.69	0.277
3300	37.73	0.262
3400	38.36	0.258
3500	39.02	0.25
3600	39.63	0.24
3800	40.86	0.23