

M5308Z

HPL 50-1/2 SF - High Fire resistant LSOH Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper - clad Aluminium Diameter:	3.6 mm		
Dielectric:	Foam Polyethylene Diameter:	9.0 mm		
Outer Conductor:	Corrugated copper Outer Diameter:	12.1 mm		
Jacket:	Black High Fire resistant Low smoke Zero Halogen Compound Diameter:	13.65 mm	Ink marking:	ACOME HPL 50 -1/2SF LSOH HFR M5308 (UL) E352156 CATVR 8AWG 75°C LOT X lot N° (+ Metric length)

MECHANICAL

Bending radius:	Operating	50 mm – Min
	Installation	25 mm – Min
Tensile Strength:		700 N – Max
Weight:		189 kg/km

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	
UV resistance:	UL 1581	
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: 82 pF/m
Passive Intermodulation : ≤-158 dBc
Velocity: 83%
Dielectric constant: 1.45
Screening effectiveness: > 120 dB
Operating frequency: 10 GHz
Peak power rating: 16 kW
Operating voltage: 1.27 kV RMS
Insulation Resistance: > 10000 MΩ.km
DC resistance:

- Inner conductor: ≤ 2.90 Ω/km
- Outer conductor: ≤ 4.30 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