

M5445Z
HYPERCELL

HPL 50-1/2F ALU - Black Polyethylene Jacket

GENERAL CHARACTERISTICS

Inner Conductor:	Copper clad Aluminum Outer Diameter: 4.8 mm
Dielectric:	Foam Polyethylene Diameter: 11.9 mm
Outer Conductor:	Corrugated Aluminum Diameter over outer conductor: 13.9 mm
Jacket:	Black Polyethylene Diameter: 16.0 mm

Marking (Metric): ACOME HYPERCELL COAX HPL 50-1/2F ALU M5445 LOT X lot No. XXXXm

MECHANICAL

Bending radius:

- Operating : 125 mm – Min
- Installation : 70 mm – Min

Tensile Strength: 900 N – Max

Weight: 179 kg/km

ENVIRONMENTAL

Temperature range:

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

Halogen content: IEC 60754-1

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: 78 pF/m
Passive Intermodulation : ≤-158 dBc (-163 dBc typical)
Velocity: 86%
Dielectric constant: 1.35
Screening effectiveness: > 120 dB
Operating frequency: ≤ 8 GHz
Cut-off frequency: 9.5 GHz
Peak power rating: 38 kW
Operating voltage: 1.6 kV RMS
Insulation Resistance: > 10000 MΩ.km
DC resistance:

- Inner conductor: ≤ 1.60 Ω/km
- Outer conductor: ≤ 2.76 Ω/km

Frequency (MHz)	Attenuation (dB/100m) @ 20°C Typical	Power kW @ 40°C-Ambient Temperature Inner conductor: 100°C
30	1.29	6.89
80	2.11	4.20
150	2.90	3.02
450	5.14	1.69
824	7.06	1.22
900	7.40	1.20
960	7.65	1.16
1000	7.81	1.13
1500	9.68	0.89
1700	10.37	0.83
1800	10.70	0.81
1900	11.02	0.79
2000	11.31	0.78
2200	11.90	0.75
2300	12.21	0.73
2400	12.51	0.71
2500	12.81	0.69
3000	14.12	0.62
3300	14.87	0.59
3400	15.12	0.58
3500	15.36	0.57
3600	15.60	0.55
3800	16.07	0.53