



# DATA SHEET

## RADIACELL - HPL 50-1-5/8RM

Flame Retardant Low Smoke Zero Halogen

AST

M5404X

Page: 1/1

- 1 - Inner Conductor** : Helically corrugated Copper tube  
Diameter :  $17.30 \pm 0.20$  mm
- 2 - Dielectric** : Foam Polyethylene  
Diameter :  $42.0 \pm 0.20$  mm  
Eccentricity : < 4%
- 3 - Outer conductor** : Annularly corrugated copper tube  
Holes milled in the top of corrugation of the outer conductor  
Diameter over outer conductor :  $46.40 \pm 0.30$  mm  
Diameter outside bottom :  $42.4 \pm 0.30$  mm  
Section length :  $10.0 \pm 0.30$  mm
- 4 - Jacket** : Low Smoke Zero Halogen Compound  
Diameter :  $50.0 \pm 0.50$  mm
- 5 - Ink marking** : Metric length



ACOME HYPERCELL COAX LSOH HPL 50-1-5/8RM M5404 LOT X lot N° +Meter

### Mechanical and Environmental Characteristics

Packaging : 500 meters  
 Weight approx. : 1515 kg/km  
 Fire resistance : IEC 332-1 / IEC 332-3A  
 Smoke toxicity : IEC 754-2 / NFC 20-454  
 Smoke density : IEC 1034

Installation Bending Radius : 350 mm - Min  
 Operating Bending Radius : 510 mm - Min  
 Tensile Strength : 1300 N - Max.  
 Operating temperature range :  $-40^{\circ}\text{C} / + 85^{\circ}\text{C}$   
 Installation temperature range :  $-20^{\circ}\text{C} / + 60^{\circ}\text{C}$

### Electrical Characteristics

Impedance :  $50 \pm 2 \Omega$   
 Capacitance : 77.5 PF/m(normal value)  
 VSWR from 100-2500 MHz: 1.3  
 Velocity : 87%, Dielectric constant : 1.32, typical values

Operating frequency : 2.5GHz  
 Peak power rating : 306 kW  
 Operating voltage : 5.4 kV RMS  
 Test voltage : 11 kV RMS  
 Insulation Resistance : > 10000 M $\Omega$ .km  
 DC Resistance : inner conductor :  $\leq 0.95 \Omega/\text{km}$   
 : outer conductor :  $\leq 0.59 \Omega/\text{km}$

*Test methods are meeting the requirements of : IEC 68 - 1196*

Frequency MHz	150	450	900	1800	2400
Attenuation dB/100 m Max at 20°C	0.80	2.00	2.70	4.40	5.60
Coupling Loss(50%) $\pm 5$ dB Measure at 2m to cable	71	80	79	89	89

Written by :LSW

Approved by : LSC

Edition : A3 - 10 / 07 / 2008