



Product: [H121A00](#) 

COAX H121 AL PVC CATV

Product Description

COAX [0.8/3.5] H121 AL PVC CATV

Technical Specifications

Product Overview

Suitable Applications:	Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117-2-1 and EN 50117-2-4; Operating at frequencies between 5 MHz and 3000 MHz
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
21	Solid	BC - Bare Copper	0.8 mm	0.015 mm	1

Conductor Count:	1
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Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	3.5 mm	0.15 mm

Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Coverage +/- Tolerance
Tape	1	Alum / Poly / Alum		1 mm		
Braid	2	Tinned Copper (TC)	43%		4.1 mm	4%

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	5 mm	0.2 mm

Table Notes:	According to European Standard HD 624
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Construction and Dimensions

Min Elongation at Breakof Jacket:	150 %
Min Tensile Strength of Jacket:	12.5 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
35 Ohm/km	75 Ohm/1000ft	40 Ohm/km

Capacitance

Nom. Capacitance	Capacitance Tolerance
53 pF/m	2 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
75 Ohm	3 Ohm	Min. 40 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	2.3 dB/100m
50 MHz	5.9 dB/100m
100 MHz	8.1 dB/100m
230 MHz	12.1 dB/100m
400 MHz	15.9 dB/100m
800 MHz	22.7 dB/100m
862 MHz	23.6 dB/100m
1000 MHz	25.6 dB/100m
1350 MHz	30 dB/100m
1750 MHz	34.5 dB/100m
2150 MHz	38.6 dB/100m
2400 MHz	41 dB/100m
3000 MHz	45.9 dB/100m

Table Notes: Max. attenuation 10% higher

Delay

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
84%	2%

High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 30 MHz	20 dB
30 - 470 MHz	20 dB
470 - 1000 MHz	18 dB
1000 - 2000 MHz	16 dB
2000 - 3000 MHz	15 dB

Table Notes: In each frequency band, 3 peak values up to 4 dB lower are allowed

Screening

Frequency [MHz]	Min. Screening Attenuation After Flexing
30 - 1000 MHz	75 dB
1000 - 2000 MHz	65 dB
2000 - 3000 MHz	55 dB

Screening Class: C

Transfer Impedance

Frequency [MHz]	Transfer Impedance
5-30 MHz	Max. 50 mOhm/m

Voltage

Voltage Test Dielectric
2.0 kV DC

Temperature Range

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-40°C To +70°C
Operating Temp Range:	-40°C To +70°C

Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	25 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	No shrinkback N

Standards

CPR Euroclass:	Eca
CENELEC Compliance:	EN 50117-2-1, EN 50117-2-4 and EN 50117-1
RG Type:	59/U Type
Series Type:	59

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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Part Number

Variants

Item #	Color	Putup Type	Length	EAN
H121A00.01B100	Black	Flat Box	100 m	8719605085450
H121A00.01250	Black	Reel	250 m	8719605085436
H121A00.01500	Black	Reel	500 m	8719605085443
H121A00.04B100	Blue	Flat Box	100 m	8719605085481
H121A00.02B100	Green	Flat Box	100 m	8719605085467
H121A00.03B100	Red	Flat Box	100 m	8719605085474
H121A00.00B100	White	Flat Box	100 m	8719605085412
H121A00.00250	White	Reel	250 m	8719605085382
H121A00.09B9999	White	Flat Box	299 m	8719605085511
H121A00.00U300	White	UnReel	300 m	8719605085429
H121A00.009999	White	Reel	499 m	8719605085405
H121A00.00500	White	Reel	500 m	8719605085399
H121A00.099999	White	Reel	999 m	8719605085504
H121A00.058500	White	Reel	8,500 m	8719605085498

History

Update and Revision:	Revision Number: 0.169 Revision Date: 06-24-2020
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