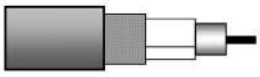
Part Number: H155A00

COAX RF H155 PVC



Product Description

COAX RF [1.4/3.9] H155 STRANDED PVC

Technical Specifications

Product Overview

Environmental Space:	Indoor - Euroclass Eca
Suitable Applications:	50 Ohm low loss coaxial transmission cable designed according European Standard EN 50117-1; Operating frequencies between 5 and 6000 MHz

Physical Characteristics (Overall)

Conductor

Stranding	Material	Construction n x D	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
Stranded	BC - Bare Copper	19x0.28 mm	1.41 mm	0.03 mm	1

Conductor Count:	1
Conductor Size:	16 AWG

Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	FPE - Foamed Polyethylene	3.9 mm	0.15 mm

Insulation, Table Note:	Centricity min. 85%

Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Aluminum/Polyester/Aluminum		2 mm			
Braid	2	TC - Tinned Copper	80 %		4.5 mm	0.25 mm	5 %

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	5.4 mm	0.2 mm

Construction and Dimensions

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

Electrical Characteristics

Conductor DCR

Max. Conductor Loop	Max. Inner Shield DCR	Max. Shield DCR
32.4 Ohm/1000ft	15.4 Ohm/km	17 Ohm/km

Capacitance

Capacitance Tolerance	Nom. Capacitance Conductor to Shield
3 pF/m	84 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance

50 Ohm	3 Ohm	Min. 40 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	2.5 dB/100m
50 MHz	6.9 dB/100m
100 MHz	9.1 dB/100m
230 MHz	13.4 dB/100m
400 MHz	18 dB/100m
800 MHz	26.1 dB/100m
862 MHz	27.3 dB/100m
1000 MHz	29.6 dB/100m
1350 MHz	34.9 dB/100m
1750 MHz	40.3 dB/100m
2150 MHz	46 dB/100m
2400 MHz	49.1 dB/100m
3000 MHz	56.3 dB/100m
3600 MHz	62.9 dB/100m
4200 MHz	69.1 dB/100m
4800 MHz	75.1 dB/100m
5400 MHz	80.8 dB/100m
6000 MHz	86.5 dB/100m

Delay

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
80 %	2 %

High Freq

Element	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
for information only	3000 - 6000 MHz	15 dB

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

Screening

Frequency [MHz]	Min. Screening Attenuation
30 - 1000 MHz	85 dB

Voltage

Voltage Test Dielectric
2.0 kV DC

Temperature Range

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-15°C To +70°C
Operating Temp Range:	-15°C To +70°C

Mechanical Characteristics

Max Recommended Pulling Tension:	100 N
Min Bend Radius (W/o Pulling Strength):	60 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	5-50 N at 25 mm N

Standards

CPR Euroclass:	Eca
CENELEC Compliance:	EN 50117-1, EN 50117-2-4 and EN 50290-2-20
RG Type:	58/U Type

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
Other Flammability:	UN ECE R118.02

Part Number

Variants

Item #	Color
H155A00.001000	Gray
H155A00.00250	Gray
H155A00.00252	Gray
H155A00.00500	Gray
H155A00.00505	Gray
H155A00.009999	Gray
H155A00.00B100	Gray
H155A00.00B50	Gray
H155A00.099999	Gray

History

Revision Number:	2