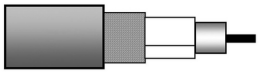
BELDEN
SENDING ALL THE RIGHT SIGNALS

Product: H155A00

COAX RF H155 PVC



Product Description

COAX RF [1.4/3.9] H155 STRANDED PVC

Technical Specifications

Product Overview

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

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

Conductor Count:	1

Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	3.9 mm	0.15 mm

Table Notes:	Centricity min. 85%

Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Tri-Laminate (Alum+Poly+Alum)	80%	2 mm			
Braid	2	Tinned Copper (TC)	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 DCR	Max. Conductor Loop	Max. Shield DCR
15.4 Ohm/km	32.4 Ohm/1000ft	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

Table Notes:	Max. attenuation 10% higher

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

Table Notes:	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. Pull 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

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

Flammability, LS0H, Toxicity Testing

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

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
H155A00.00B50	Gray	Flat Box	50 m	8719605087881
H155A00.00B100	Gray	Flat Box	100 m	8719605087874
H155A00.00250	Gray	Reel	250 m	8719605087829
H155A00.00500	Gray	Reel	500 m	8719605087843
H155A00.001000	Gray	Reel	1,000 m	8719605087812

History

Update and Revision:	Revision Number: 0.177 Revision Date: 09-30-2020