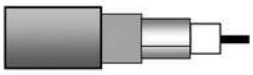
Part Number: H155A02

COAX RF H155 FRNC



Product Description

COAX RF [1.4/3.9] H155 STRANDED FRNC

Technical Specifications

Product Overview

Environmental Space:	Indoor - Euroclass Dca
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
LSZH / FRNC	5.4 mm	0.2 mm

Construction and Dimensions

Min Elongation at Breakof Jacket:	125 %
Min Tensile Strength of Jacket:	9 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

Nom. Capacitance	Capacitance Tolerance
84 pF/m	3 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

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
3000 - 6000 MHz	15 dB

High Freq Table Note:	In each frequency band, 3 peak values up to 4 dB lower are allowed, values above 3000 MHZ for information only

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:	-30°C To +70°C
Operating Temp Range:	-30°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:	Dca-s1,d1,a1
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):	2013-02-19

Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
Other Flammability:	UN ECE R118.02
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

Part Number

Variants

Item #	Color	Length
H155A02.001010	Black	1,010 m
H155A02.00505	Black	505 m

History

Revision Number:	3

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