

# Product: YE03413

# 5X COAX MINI RG59/U QUAD SHIELD PVC HEAD END

## **Product Description**

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5X COAX [0.58/2.6] MINI RG59U/ QUAD SHIELD PVC HEAD END

## **Technical Specifications**

### **Product Overview**

Suitable Applications: Mini RG59 tri shield coaxial cable used where immunity to conducted disturbances is required, but space is limited; Coaxial cable used in cable broadBand communication networks designed according European Standard EN 50117-1; Operating frequencies between 5 and 3000 MHz	I
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## **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Materi	al	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
23	Solid	BC - Bare (	Copper	0.58 mm	0.02 mm	5
Condu	uctor Count:		5			

## Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	2.59 mm	0.15 mm

#### Color Chart

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

#### Inner Shield

Туре	Layer	Material	Coverage [%]	Min. Overlap	Coverage +/- Tolerance
Таре	1	Tri-Laminate (Alum+Poly+Alum)		2 mm	
Braid	2	Tinned Copper (TC)	95%		5%
Tape	3	Tri-Laminate (Alum+Poly+Alum)		1 mm	
Braid	4	Tinned Copper (TC)	90%		5%

#### Inner Jacket

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	4.7 mm	0.23 mm

#### Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	14.5 mm

**Construction and Dimensions** 

## Cabling

5 coax bundled around a filler covered with nonwoven foil Polypropylene (1x)

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
66 Ohm/km	75 Ohm/1000ft	6.5 Ohm/km

#### Capacitance

Nom. Capacitance	Capacitance Capacit	ance Tolerance
53 pF/m	n 2 pF/m	
Min Insulation Resis	ulation Resistance:	10000 MOhm*

#### Impedance

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

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Inser	rtion Loss	
1 MHz	1.7 dB/100	m	
3.6 MHz	2.6 dB/100	m	
10 MHz	3.9 dB/100	m	
71.5 MHz	10 dB/100n	n	
135 MHz	12.5 dB/10	0m	
270 MHz	17.7 dB/10	0m	
540 MHz	25.3 dB/10	0m	
720 MHz	31.1 dB/100m		
750 MHz	31.5 dB/10	0m	
1000 MHz	34.4 dB/10	0m	
1500 MHz	42.7 dB/10	0m	
2000 MHz	52 dB/100m		
2250 MHz	52.5 dB/100m		
3000 MHz	60.7 dB/100m		
Table Notes:		Max. atten	

Max. attenuation 10% higher

## Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance		
400 ns/ft	83%	2%		

## High Frequency

Frequency [MHz]	Min. RL (Return Loss) [dB]	
5 - 30 MHz	23 dB	
30 - 850 MHz	23 dB	
850 - 3000 MHz	21 dB	
Table Notes:	In each frequency	y ba

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	110 dB
1000 - 2000 MHz	95 dB
2000 - 3000 MHz	85 dB
Screening Class:	A++

#### Transfer Impedance

Frequency [MHz]	Transfer Impedance
5-30 MHz	Max. 0.9 mOhm/m
1	
Temperature R	ange
Installation Tempera Range:	ature -5°C To +5

Storage Temperature Range:	-40°C To +70°C
Operating Temperature Range:	-40°C To +70°C

#### **Mechanical Characteristics**

Max. Pull Tension:	160 N
Min Bend Radius (W/o Pulling Strength):	150 mm
Min Bend Radius (Each Coax):	47 mm

## Standards

CENELEC Compliance:	EN 50117-1, EN 50117-9-2, EN 50290-2-20
RG Type:	Mini 59

### **Applicable Environmental and Other Programs**

Environmental Space: Indoor/Outdoor

### Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT4
IEC Flammability:	IEC 60332-3-24

#### **Related Part Numbers**

#### Variants

ltem #	Color	Put-Up Type	Length	EAN
YE03413.00500	Black	Reel	500 m	8719605118417

#### History

Update and Revision: Revision Number: 0.145 Revision Date: 04-29-2024

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