

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 |
|---|---|
|---|---|

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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