



Product: [8281F](#)

75 Ohm Analog Video Coax, RG-59, 21 AWG Str BC, Double 95% TC Braid, PVC Jkt. Flexible

Product Description

75 Ohm Analog Video Coax, RG-59, 21 AWG (7x29) Bare Copper (Compacted) Conductor , PE Insulation, Double 95% Tinned Copper Braid Shield, PVC Jacket, Flexible

Technical Specifications

Product Overview

| | |
|------------------------|-----------------------|
| Suitable Applications: | Standard analog video |
|------------------------|-----------------------|

Construction Details

| | |
|----------|----|
| RG Type: | 59 |
|----------|----|

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|--------------------------------|
| 21 AWG | 7x29 | 0.032 in | BC-C - Bare Copper (Compacted) |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|------------|
| PE - Polyethylene | 0.193 in (4.90 mm) | White |

Outer Shield

| Layer | Outer Shield Type | Material | Coverage |
|-------|-------------------|--------------------|----------|
| 1 | Braid | Tinned Copper (TC) | 95% |
| 2 | Braid | Tinned Copper (TC) | 95% |

Outer Jacket

| Material | Nom. Diameter |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.304 in (7.72 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.304 in (7.72 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Return Loss (RL)

| Frequency | Min. Return Loss |
|---------------|------------------|
| 2 - 216 MHz | 27 dB |
| 217 - 830 MHz | 23 dB |

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 0.3 dB/100ft |
| 3.6 MHz | 0.5 dB/100ft |
| 10 MHz | 0.9 dB/100ft |
| 71.5 MHz | 2.5 dB/100ft |
| 135 MHz | 3.6 dB/100ft |
| 270 MHz | 5.1 dB/100ft |
| 360 MHz | 6 dB/100ft |

| | |
|----------|---------------|
| 540 MHz | 7.4 dB/100ft |
| 720 MHz | 8.7 dB/100ft |
| 750 MHz | 8.9 dB/100ft |
| 1000 MHz | 10.5 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 11.6 Ohm/1000ft | 1.7 Ohm/1000ft (5.6 Ohm/km) | 20.5 pF/ft (67.3 pF/m) | 75 Ohm | 66% |

Voltage

| Voltage Rating |
|----------------|
| 2900 V |

Mechanical Characteristics

Temperature

| Operating |
|----------------|
| -20°C to +60°C |

Bend Radius

| Installation Min. |
|-------------------|
| 3.0 in (76 mm) |

| | |
|--------------------|-------------------|
| Max. Pull Tension: | 168 lbs (76.2 kg) |
| Bulk Cable Weight: | 61 lbs/1000ft |

Standards and Compliance

| | |
|--------------------------------|--|
| Environmental Suitability: | Indoor (Not Riser or Plenum), Indoor, Aerial - Black only, When supported by messenger wire |
| Sustainability: | CA Prop 65 |
| CPR Compliance: | CPR Euroclass: Eca |
| European Directive Compliance: | EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance: | UKCA Mark |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Product Notes

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| Notes: | Compacted copper combines the Impedance uniformity of solid conductors and the ""nick-resistance"" of stranded conductors. |
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History

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| Update and Revision: | Revision Number: 0.477 Revision Date: 04-29-2024 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|--------------------|------------|----------|--------------|----------|
| 8281F J5C500 | Black, Vivid Matte | Reel | 500 ft | 612825355465 | |
| 8281F J5C1000 | Black, Vivid Matte | Reel | 1,000 ft | 612825355472 | C |
| 8281F G7X1000 | Blue, Matte | Reel | 1,000 ft | 612825357988 | C |
| 8281F U901000 | Gray, Matte | Reel | 1,000 ft | 612825203605 | C |
| 8281F G7W1000 | Green, Matte | Reel | 1,000 ft | 612825355533 | C |
| 8281F G7V1000 | Red, Matte | Reel | 1,000 ft | 612825355991 | C |

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