



**Product:** [83284](#)

Mil-Spec Coax, 50 Ohm, RG-316, 26 AWG Str SCCS, 95% SC Braid, FEP Jkt, Commercial Non-QPL

### Product Description

Mil-Spec Coax, 50 Ohm, RG-316, 26 AWG (7x34) Silvered Copper Covered Steel Conductor, PTFE Insulation, 95% Silvered Copper Braid Shield, FEP Jacket, Commercial, non-QPL

### Technical Specifications

#### Product Overview

|                        |                                  |
|------------------------|----------------------------------|
| Suitable Applications: | Aerospace wireless communication |
|------------------------|----------------------------------|

#### Construction Details

|          |     |
|----------|-----|
| RG Type: | 316 |
|----------|-----|

#### Conductor

| Size   | Stranding | Nom. Diameter | Material                             |
|--------|-----------|---------------|--------------------------------------|
| 26 AWG | 7x34      | 0.020 in      | SCCS - Silvered Copper Covered Steel |

#### Insulation

| Material                       | Nom. Insulation Diameter |
|--------------------------------|--------------------------|
| PTFE - Polytetrafluoroethylene | 0.060 in (1.5 mm)        |

#### Outer Shield

| Outer Shield Type | Material             | Coverage |
|-------------------|----------------------|----------|
| Braid             | Silvered Copper (SC) | 95%      |

#### Outer Jacket

| Material                             | Nom. Diameter     |
|--------------------------------------|-------------------|
| FEP - Fluorinated Ethylene Propylene | 0.098 in (2.5 mm) |

|                                   |                   |
|-----------------------------------|-------------------|
| Overall Cable Diameter (Nominal): | 0.098 in (2.5 mm) |
|-----------------------------------|-------------------|

#### Electrical Characteristics

#### VSWR

| Frequency        | Max. VSWR         |
|------------------|-------------------|
| 1 MHz - 3000 MHz | per M17/113-RG316 |

#### Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 1.2 dB/100ft     |
| 10 MHz    | 2.7 dB/100ft     |
| 50 MHz    | 5.6 dB/100ft     |
| 100 MHz   | 8.3 dB/100ft     |
| 200 MHz   | 12.0 dB/100ft    |
| 400 MHz   | 17.5 dB/100ft    |
| 700 MHz   | 23.7 dB/100ft    |
| 900 MHz   | 27.3 dB/100ft    |
| 1000 MHz  | 29.0 dB/100ft    |

|          |               |
|----------|---------------|
| 1500 MHz | 36.5 dB/100ft |
| 2000 MHz | 42.5 dB/100ft |
| 2400 MHz | 47.2 dB/100ft |
| 3000 MHz | 53.6 dB/100ft |

#### Electricals

| Nom. Conductor DCR           | Nom. Outer Shield DCR      | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|------------------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 82.5 Ohm/1000ft (271 Ohm/km) | 8.5 Ohm/1000ft (28 Ohm/km) | 29 pF/ft (95 pF/m)              | 50 Ohm                        | 70%                    |

#### Voltage

| Voltage Rating   |
|------------------|
| 900 V (Mil-Spec) |

## Mechanical Characteristics

#### Temperature

| Operating       |
|-----------------|
| -70°C to +200°C |

#### Bend Radius

| Installation Min. |
|-------------------|
| 1 in              |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 27 lbs (12 kg) |
| Bulk Cable Weight: | 10 lbs/1000ft  |

## Standards and Compliance

|                                |  |
|--------------------------------|--|
| Environmental Suitability:     | Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire                                  |
| Sustainability:                | CA Prop 65   |
| Military Compliance:           | Commercial, non-QPL product (M17/113-RG316)  |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)  |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.351 Revision Date: 11-09-2022 |
|----------------------|--|

## Part Numbers

#### Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 83284 009100  | White | Reel       | 100 ft   | 612825203797 |
| 83284 009500  | White | Reel       | 500 ft   | 612825206118 |
| 83284 0091000 | White | Reel       | 1,000 ft | 612825203803 |

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