



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 | Color Code |
|--------------------------------|--------------------------|------------|
| PTFE - Polytetrafluoroethylene | 0.060 in (1.5 mm) | White |

Outer Shield

| Layer | Outer Shield Type | Material | Coverage |
|-------|-------------------|----------------------|----------|
| 1 | 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 (25 mm) |

| | |
|--------------------|-----------------|
| Max. Pull Tension: | 21 lbs (9.5 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

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|----------------------|--|
| Update and Revision: | Revision Number: 0.508 Revision Date: 04-13-2023 |
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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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