



Product: [83242](#)

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid SCCS, Double 95% SC Braid, FEP Jkt, CMP, Commercial Non-QPL

Product Description

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid Silvered Copper Covered Steel Conductor, PTFE Insulation, Double 95% Silvered Copper Braid Shield, FEP Jacket, CMP, Commercial, non-QPL

Technical Specifications

Product Overview

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

Construction Details

| | |
|----------|-----|
| RG Type: | 142 |
|----------|-----|

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|--------------------------------------|
| 19 AWG | Solid | 0.037 in | SCCS - Silvered Copper Covered Steel |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|--------------------------------|--------------------------|------------|
| PTFE - Polytetrafluoroethylene | 0.116 in (2.95 mm) | White |

Outer Shield

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

Outer Jacket

| Material | Nom. Diameter |
|--------------------------------------|--------------------|
| FEP - Fluorinated Ethylene Propylene | 0.195 in (4.95 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.195 in (4.95 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 0.3 dB/100ft |
| 10 MHz | 1.1 dB/100ft |
| 50 MHz | 2.6 dB/100ft |
| 100 MHz | 3.8 dB/100ft |
| 200 MHz | 5.6 dB/100ft |
| 400 MHz | 6.9 dB/100ft |
| 700 MHz | 10.7 dB/100ft |
| 900 MHz | 12.3 dB/100ft |
| 1000 MHz | 13.1 dB/100ft |
| 2000 MHz | 19.3 dB/100ft |
| 3000 MHz | 24.2 dB/100ft |
| 5000 MHz | 32.6 dB/100ft |

| | |
|----------|---------------|
| 8000 MHz | 43.2 dB/100ft |
|----------|---------------|

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 19.0 Ohm/1000ft | 2.3 Ohm/1000ft (7.5 Ohm/km) | 29 pF/ft (95 pF/m) | 50 Ohm | 70% |

Voltage

| UL Voltage Rating | Voltage Rating |
|-------------------|-------------------|
| 300 V (CMP) | 1400 V (Mil-Spec) |

Mechanical Characteristics

Temperature

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

Bend Radius

| Installation Min. |
|-------------------|
| 2 in (51 mm) |

| | |
|--------------------|-------------------|
| Max. Pull Tension: | 103 lbs (46.7 kg) |
| Bulk Cable Weight: | 42 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Indoor - Plenum, Indoor, Outdoor, UV Resistance, Aerial - When supported by messenger wire |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | NFPA 262 |
| NEC / UL Compliance: | CMP |
| CEC / C(UL) Compliance: | CMP |
| Military Compliance: | Commercial, non-QPL product (M17/158-00001) |
| European Directive Compliance: | REACH |

History

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| Update and Revision: | Revision Number: 0.512 Revision Date: 04-29-2024 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83242 001100 | Brown | Reel | 100 ft | 612825203612 | C E |
| 83242 001500 | Brown | Reel | 500 ft | 612825203650 | C E |
| 83242 0011000 | Brown | Reel | 1,000 ft | 612825203629 | C E |

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