



Product: <u>1675A</u> ☑

Conformable Coax, 50 Ohm, RG-401, 14 AWG Solid SCCS, Copper-Tin Composite Shield, Unjacketed

Product Description

Conformable Coax, 50 Ohm, RG-401, 14 AWG Solid Silvered Copper Covered Steel Conductor, PTFE Insulation, Copper Tape + 100% Tin-Filled Composite Braid Shield, Unjacketed

Technical Specifications

Product Overview

| Suitable Applications: | Microwave and other high frequency applications, Interconnect RF equipment, Radar equipment, Military communications |
|-----------------------------|--|
| Construction Details | |
| RG Type: | 401 |
| | |

Conductor

| Number of Element | Size | Stranding | Nom. Diameter | Material |
|-------------------|--------|-----------|---------------|--------------------------------------|
| 1 | 14 AWG | Solid | 0.065 in | SCCS - Silvered Copper Covered Steel |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|--------------------------------|--------------------------|------------|
| PTFE - Polytetrafluoroethylene | 0.21 in (5.3 mm) | White |

Outer Shield

| Layer | Outer Shield Type | Material | Coverage |
|-------|-------------------|---------------------------------|----------|
| 1 | Tape | Bare Copper (BC) | 100% |
| 2 | Braid | Tinned Copper (TC + Tin Filled) | 100% |

Outer Jacket



Overall Cable Diameter (Nominal): 0.246 in (6.25 mm)

Electrical Characteristics

VSWR

| Frequency | Max. VSWR |
|-----------|-----------|
| 400 MHz | 1.10:1 |
| 1000 MHz | 1.11:1 |
| 3000 MHz | 1.14:1 |
| 7000 MHz | 1.21:1 |
| 10000 MHz | 1.25:1 |
| 18000 MHz | 1.38:1 |

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 400 MHz | 3.8 dB/100ft |
| 500 MHz | 4.4 dB/100ft |
| 1000 MHz | 6.8 dB/100ft |

| 2000 MHz | 10.4 dB/100ft |
|-----------|---------------|
| 3000 MHz | 13 dB/100ft |
| 5000 MHz | 19 dB/100ft |
| 7000 MHz | 22.8 dB/100ft |
| 10000 MHz | 28 dB/100ft |
| 15000 MHz | 36.6 dB/100ft |
| 18000 MHz | 41.0 dB/100ft |

Power Rating

| Frequency | Max. Power Rating |
|------------|-------------------|
| 400 MHz | 1,900 W |
| 500 MHz | 1,665 W |
| 1,000 MHz | 1,105 W |
| 2,000 MHz | 733 W |
| 3,000 MHz | 577 W |
| 5,000 MHz | 427 W |
| 7,000 MHz | 350 W |
| 10,000 MHz | 283 W |
| 15,000 MHz | 223 W |
| 18,000 MHz | 200 W |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 2.5 Ohm/1000ft (8.2 Ohm/km) | 8.6 Ohm/1000ft (28 Ohm/km) | 29.6 pF/ft (97.1 pF/m) | 50 Ohm | 70% |

Voltage

| UL Voltage Rati | ng Voltage Ratin | ing |
|-------------------|-------------------|-----|
| 30 V RMS | 2900 V RMS | · |
| Electrical Charac | cteristics Notes: | ٧ |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------------|
| 105°C | -70°C To +200°C |

Bend Radius

| | Stationary Min. | Installation Mi | n. Flexing Min. |
|----|--------------------|------------------|------------------------|
| 1. | .125 in (28.58 mm) | .375 in (9.53 mi | m) 1.125 in (28.58 mm) |
| М | lax. Pull Tension: | 1 | 22 lbs (55.3 kg) |
| В | Bulk Cable Weight: | | 11 lbs/1000ft |

Standards and Compliance

| Environmental Suitability: | Indoor/Outdoor, Indoor, Outdoor | | |
|--------------------------------|--|--|--|
| AWM Compliance: | AWM 10245 | | |
| European Directive Compliance: | EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) | | |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) | | |

Product Notes

| Notes: | Commercial non-QPL product | |
|--------|----------------------------|--|
|--------|----------------------------|--|

History

| Update and Revision: | Revision Number: 0.474 Revision Date: 05-03-2023 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|--------------|-------|------------|--------|--------------|
| 1675A TIN100 | Tin | Reel | 100 ft | 612825120537 |
| 1675A TIN500 | Tin | Reel | 500 ft | 612825120544 |

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