



Product: [1675A](#)

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

| No. of Elements | 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

| Material  |
|-----------|
| No 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 Rating | Voltage Rating |
|-------------------|----------------|
| 30 V RMS          | 2900 V RMS     |

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| Electrical Characteristics Notes: | VSWR limit is a continuous sloping line from 500 MHz to 18 GHz |
|-----------------------------------|----------------------------------------------------------------|

Mechanical Characteristics

Temperature

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

Bend Radius

| Stationary Min.     | Installation Min. | Flexing Min.        |
|---------------------|-------------------|---------------------|
| 1.125 in (28.58 mm) | .375 in (9.53 mm) | 1.125 in (28.58 mm) |
| Max. Pull Tension:  | 122 lbs (55.3 kg) |                     |
| Bulk Cable Weight:  | 81 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 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

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

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