

1675A Coax - 50 Ohm Microwave Cable

For more Information
please call

1-800-Belden1



General Description:

RG-401/U type, 14 AWG solid .065" silver-plated copper conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), unjacketed.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (mm) |
|--------|-----|-----------|----------------------------|-----------|
| 1 | 14 | Solid | SPC - Silver Plated Copper | 1.651 |

Total Number of Conductors: 1

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Dia. (mm) |
|-----------------------|---------------------------|-----------|
| Teflon® | TFE - Tetrafluoroethylene | 5.334 |

Outer Shield

Outer Shield Material:

| Layer # | Type | Outer Shield Material | Coverage (%) |
|---------|-------|-----------------------|--------------|
| 1 | Tape | Copper Foil | 100 |
| 2 | Braid | Tin-Filled Composite | 100 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material |
|-----------------------|
| Unjacketed |

Overall Cable

Overall Nominal Diameter: 6.248 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

UL Temperature Rating: 105°C

Non-UL Temperature Rating: 200°C

Bulk Cable Weight: 120.544 Kg/Km

Max. Recommended Pulling Tension: 542.680 N

Min. Bend/Installation: 9.525 mm

Min. Flexing Radius: 2.858 cm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

AWM Specification: UL Style 10245

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

| | |
|---------------------------------------|------------|
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| RG Type: | 401/U |

Flame Test

| | |
|-------------------|-----------------|
| Other Flame Test: | Horizontal Wire |
|-------------------|-----------------|

Suitability

| | |
|------------------------|-----|
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| |
|-----------------|
| Impedance (Ohm) |
| 50 |

Nom. Inductance:

| |
|-------------------|
| Inductance (µH/m) |
| 0.22967 |

Nom. Capacitance Conductor to Shield:

| |
|--------------------|
| Capacitance (pF/m) |
| 97.1176 |

Nominal Velocity of Propagation:

| |
|--------|
| VP (%) |
| 69.5 |

Nominal Delay:

| |
|--------------|
| Delay (ns/m) |
| 4.79026 |

Nom. Conductor DC Resistance:

| |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 8.2025 |

Nominal Outer Shield DC Resistance:

| |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 26.248 |

Maximum VSWR:

| Description | Freq. (MHz) | Max. VSWR |
|---------------------------|-------------|-----------|
| Ramp Function, End Points | 400 | 1.1 |
| | 1800 | 1.38 |

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 400 | 12.4678 |
| 500 | 14.4364 |
| 1000 | 22.3108 |
| 2000 | 34.1224 |
| 3000 | 43.9654 |
| 5000 | 60.6985 |
| 7000 | 74.8068 |
| 10000 | 93.1804 |

| | |
|-------|---------|
| 15000 | 120.085 |
| 18000 | 134.521 |

Max. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 400 | 16.405 |
| 500 | 18.7017 |
| 1000 | 28.8728 |
| 3000 | 56.7613 |
| 5000 | 78.0878 |
| 10000 | 120.085 |
| 18000 | 173.237 |

Nom. Power Rating:

| Freq. (MHz) | Rating (W) |
|-------------|------------|
| 400 | 1900 |
| 500 | 1665 |
| 1000 | 1105 |
| 2000 | 733 |
| 3000 | 577 |
| 5000 | 427 |
| 7000 | 350 |
| 10000 | 283 |
| 15000 | 223 |
| 18000 | 200 |

Max. Operating Voltage - UL:

| Voltage |
|----------|
| 30 V RMS |

Max. Operating Voltage - Non-UL:

| Voltage |
|------------|
| 2900 V RMS |

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|--------|-------------|-------------|-------|-------------------------------|
| 1675A TIN100 | 100 FT | 8.400 LB | TIN - COLOR | E | #14 TFE CU FS BRD TINNED COAX |
| 1675A TIN500 | 500 FT | 42.000 LB | TIN - COLOR | C E | #14 TFE CU FS BRD TINNED COAX |

Notes:

C = CRATE REEL PUT-UP.

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).