

## 1671B Coax - 50 Ohm Microwave Cables

For more Information  
please call

1-800-Belden1

**General Description:**

RG-405/U type, 24 AWG solid .020" 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. (in.) |
|--------|-----|-----------|----------------------------|------------|
| 1      | 24  | Solid     | SPC - Silver Plated Copper | .020       |

Total Number of Conductors: 1

**Insulation****Insulation Material:**

| Insulation Trade Name | Insulation Material       | Dia. (in.) |
|-----------------------|---------------------------|------------|
| Teflon®               | TFE - Tetrafluoroethylene | .062       |

**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: 0.085 in.

**Mechanical Characteristics (Overall)**

|  |                            |
|--|----------------------------|
| Operating Temperature Range:           | -70°C To +200°C            |
| UL Temperature Rating:                 | 105°C (UL AWM Style 10245) |
| Non-UL Temperature Rating:             | 200°C                      |
| Bulk Cable Weight:                     | 11 lbs/1000 ft.            |
| Max. Recommended Pulling Tension:      | 26 lbs.                    |
| Min. Bend Radius/Minor Axis:           | 0.100 in.                  |
| Min. Bend Radius (Continuous Flexing): | 0.370 in.                  |

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

|                                    |                             |
|------------------------------------|-----------------------------|
| AWM Specification:                 | UL Style 10245 (30 V 105°C) |
| EU Directive 2011/65/EU (ROHS II): | Yes                         |
| EU CE Mark:                        | Yes                         |
| EU Directive 2000/53/EC (ELV):     | Yes                         |

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|                                 |     |
|---------------------------------|-----|
| 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: | 405/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/ft) |
|--------------------|
|--------------------|

|     |
|-----|
| .07 |
|-----|

**Nom. Capacitance Conductor to Shield:**

| Capacitance (pF/ft) |
|---------------------|
|---------------------|

|      |
|------|
| 29.5 |
|------|

**Nominal Velocity of Propagation:**

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

|      |
|------|
| 69.5 |
|------|

**Nominal Delay:**

| Delay (ns/ft) |
|---------------|
|---------------|

|      |
|------|
| 1.46 |
|------|

**Nom. Conductor DC Resistance:**

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
|--------------------------|

|      |
|------|
| 25.7 |
|------|

**Nominal Outer Shield DC Resistance:**

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
|--------------------------|

|      |
|------|
| 10.2 |
|------|

**Maximum VSWR:**

| Freq. (MHz) | Max. VSWR |
|-------------|-----------|
|-------------|-----------|

|     |       |
|-----|-------|
| 500 | 1.1:1 |
|-----|-------|

|       |       |
|-------|-------|
| 20000 | 1.3:1 |
|-------|-------|

**Nom. Attenuation:**

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
|-------------|--------------------------|

|     |      |
|-----|------|
| 500 | 15.0 |
|-----|------|

|      |      |
|------|------|
| 1000 | 22.2 |
|------|------|

|      |      |
|------|------|
| 2000 | 32.8 |
|------|------|

|      |      |
|------|------|
| 3000 | 41.2 |
|------|------|

|      |      |
|------|------|
| 5000 | 54.9 |
|------|------|

|      |      |
|------|------|
| 7000 | 66.4 |
|------|------|

|       |      |
|-------|------|
| 10000 | 81.2 |
|-------|------|

|       |     |
|-------|-----|
| 15000 | 102 |
|-------|-----|

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|       |     |
|-------|-----|
| 18000 | 113 |
| 20000 | 120 |

## Max. Power Rating:

| Freq. (MHz) | Rating (W) |
|-------------|------------|
| 500         | 180        |
| 1000        | 119        |
| 2000        | 79         |
| 3000        | 62         |
| 5000        | 46         |
| 7000        | 37         |
| 10000       | 30         |
| 15000       | 24         |
| 18000       | 21         |
| 20000       | 20         |

## Max. Operating Voltage - UL:

| Voltage                       |
|-------------------------------|
| 30 V RMS (UL AWM Style 10245) |

## Max. Operating Voltage - Non-UL:

| Voltage    |
|------------|
| 1500 V RMS |

## Misc. Information (Overall)

## 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                     |
|--------------|--------|-------------|-------------|-------|-------------------------------|
| 1671B TIN500 | 500 FT | 6.500 LB    | TIN - COLOR | E     | #24 TFE CU FS BRD TINNED COAX |

## Notes:

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

Revision Number: 3    Revision Date: 11-13-2012

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