

## 1281R Coax - 75 Ohm Miniature Coax



For more Information  
please call

1-800-Belden1

**Description:**

25 AWG solid .018" tinned copper conductor, gas-injected foam HDPE insulation, lightly bonded aluminum foil-polyester tape-aluminum foil shield with a 95% tinned copper braid shield, PVC jacket.

**Usage (Overall)****Suitable Applications:**

Analog video, digital video, Mini Hi-Res, video, VGA, SVGA, 825, RGB, Composite Video, Component Video, Video Distribution, Graphic Displays, special effects editing, animation, post production. Home Theater, boardrooms, office, casino, church, synagogue, house of worship, teleconferencing, digital

**Physical Characteristics (Overall)****Conductor****AWG:**

| # Coax | AWG  | Stranding | Conductor Material | Dia. (in.) |
|--------|------|-----------|--------------------|------------|
| 1      | 25.0 | Solid     | TC - Tinned Copper | .018       |

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

| Insulation Material                                 | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .074       |

**Outer Shield****Outer Shield Material:**

| Layer # | Outer Shield Trade Name | Type  | Outer Shield Material                                   | Coverage (%) |
|---------|-------------------------|-------|---|--------------|
| 1       | Bonded Duofoil®         | Tape  | Light Bonded Aluminum Foil-Polyester Tape-Aluminum Foil | 100          |
| 2       |                         | Braid | TC - Tinned Copper                                      | 95           |

**Outer Jacket****Outer Jacket Material:**

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

**Overall Cable**

Overall Nominal Diameter: 0.114 in.

**Mechanical Characteristics (Overall)**

|  |                |
|--|----------------|
| Operating Temperature Range:           | -20°C To +75°C |
| UL Temperature Rating:                 | 60°C           |
| Non-UL Temperature Rating:             | 75°C           |
| Bulk Cable Weight:                     | 8 lbs/1000 ft. |
| Max. Recommended Pulling Tension:      | 23 lbs.        |
| Min. Bend Radius (Install)/Minor Axis: | 1.500 in.      |

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

|                          |     |
|--------------------------|-----|
| NEC/(UL) Specification:  | CMR |
| CEC/C(UL) Specification: | CMG |

## 1281R Coax - 75 Ohm Miniature Coax

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

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 06/25/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire &amp; Cable): Yes

MII Order #39 (China RoHS): Yes

**Flame Test**

UL Flame Test: UL1666 Vertical Riser

**Suitability**

Suitability - Indoor: Yes

Suitability - Outdoor: No

Suitability - Aerial: No

**Plenum/Non-Plenum**

Plenum (Y/N): No

**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)

75

**Nom. Inductance:**

Inductance (µH/ft)

.106

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)

17.0

**Nominal Velocity of Propagation:**

VP (%)

80

**Nominal Delay:**

Delay (ns/ft)

1.24

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

34.0

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

5.4

**Nom. Attenuation:**

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

|      |      |
|------|------|
| 1    | 0.52 |
| 5    | 1.17 |
| 50   | 3.7  |
| 100  | 4.9  |
| 200  | 6.7  |
| 400  | 9.5  |
| 700  | 13.4 |
| 900  | 15.0 |
| 1000 | 15.8 |
| 3000 | 31.2 |

**Max. Operating Voltage - UL:**

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## Voltage

300 V RMS

**Other Electrical Characteristic 1:** Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 3 Ohms

**Other Electrical Characteristic 2:** Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

## Minimum Return Loss:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------|-------------|-------------------|------------------|--------------|
|             |             | 5                 | 850              | 20           |

## Sweep Test

**Sweep Testing:** 100% Sweep tested 5 MHz to 850 MHz.

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc                  |
|---------------|----------|-------------|-------|-------|----------------------------|
| 1281R 0101000 | 1,000 FT | 10.000 LB   | BLACK | C     | #25LDPE/GIFHDLDPE SH FRPVC |

## Notes:

C = CRATE REEL PUT-UP.

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