### **ENGLISH MEASUREMENT VERSION**



7710A Coax - RG-6/U Type

For more Information please call

1-800-Belden1



# **Description:**

RG-6/U type, 18 AWG solid .040" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

## **Usage (Overall)**

Suitable Applications: Video Mult.

# **Physical Characteristics (Overall)**

### Conductor

AWG:

| # Coax | AWG | Stranding | <b>Conductor Material</b> | Dia. (in.) |
|--------|-----|-----------|---------------------------|------------|
| 3      | 18  | Solid     | BC - Bare Copper          | .040       |

#### Insulation

**Insulation Material:** 

| Insulation Material                                 | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .180       |

#### **Inner Shield**

# Inner Shield Material:

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

### **Inner Jacket**

## Inner Jacket Material:

| Inner Jacket Material    | Nom. Dia. (in.) |
|--------------------------|-----------------|
| PVC - Polyvinyl Chloride | .275            |

## Inner Jacket Color Code Chart:

| Number | Color |
|--------|-------|
| 1      | Red   |
| 2      | Green |
| 3      | Blue  |

### **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material PVC - Polyvinyl Chloride

### **Overall Cable**

Overall Nominal Diameter: 0.746 in.

| Mechanical Characteristics (Overall) |                  |  |  |  |
|--------------------------------------|------------------|--|--|--|
| Operating Temperature Range:         | -40°C To +75°C   |  |  |  |
| UL Temperature Rating:               | 60°C             |  |  |  |
| Non-UL Temperature Rating:           | 75°C             |  |  |  |
| Bulk Cable Weight:                   | 243 lbs/1000 ft. |  |  |  |
| Max. Recommended Pulling Tension:    | 207 lbs.         |  |  |  |

Page 1 of 4 01-06-2012





# 7710A Coax - RG-6/U Type

| Min. Bend Radius (Install)/Minor Axis:                    | 8 in.  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Applicable Specifications and Agency Compliance (Overall) |  |  |  |  |  |  |
| Applicable Standards & Environmental Programs             |  |  |  |  |  |  |
| NEC/(UL) Specification:                                   | CMR  |  |  |  |  |  |
| CEC/C(UL) Specification:                                  | CMG  |  |  |  |  |  |
| AWM Specification:  | UL Style 1354 (each coax); UL Style 2688 (overall) |  |  |  |  |  |
| EU CE Mark:   | No   |  |  |  |  |  |
| EU Directive 2000/53/EC (ELV):                            | Yes  |  |  |  |  |  |
| EU Directive 2002/95/EC (RoHS):                           | Yes  |  |  |  |  |  |
| EU RoHS Compliance Date (mm/dd/yyyy):                     | 01/01/2004   |  |  |  |  |  |
| 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:  | 6/U  |  |  |  |  |  |
| lame Test   |  |  |  |  |  |  |
| UL Flame Test:  | UL1666 Vertical Shaft                              |  |  |  |  |  |
| Suitability   |  |  |  |  |  |  |
| Suitability - Indoor:                                     | Yes  |  |  |  |  |  |
| Suitability - Outdoor:                                    | Yes  |  |  |  |  |  |
| Plenum/Non-Plenum   |  |  |  |  |  |  |
| Plenum (Y/N):   | No   |  |  |  |  |  |

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.0

### Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1.000       | 0.240                    |
| 3.580       | 0.440                    |
| 5.000       | 0.520                    |
| 7.000       | 0.610                    |

Page 2 of 4 01-06-2012

#### **ENGLISH MEASUREMENT VERSION**



7710A Coax - RG-6/U Type

| 10.000   | 0.710  |
|----------|--------|
| 67.500   | 1.650  |
| 71.500   | 1.690  |
| 88.500   | 1.860  |
| 100.000  | 1.950  |
| 135.000  | 2.240  |
| 143.000  | 2.300  |
| 180.000  | 2.570  |
| 270.000  | 3.170  |
| 360.000  | 3.690  |
| 540.000  | 4.600  |
| 720.000  | 5.380  |
| 750.000  | 5.500  |
| 1000.000 | 6.420  |
| 1500.000 | 7.990  |
| 2000.000 | 9.370  |
| 2250.000 | 10.010 |
| 3000.000 | 11.780 |

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1:

Impedance tested in accordance with ASTM D-4566 paragraph 48.2, option 2

using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2:

Return Loss tested in accordance with ASTM D-4566 paragraph 50.3, using a 75 Ohm fixed bridge and termination.

#### Minimum Structural Return Loss:

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. SRL (dB) |
|-------------------|------------------|---------------|
| 5                 | 580              | 23            |
| 580               | 680              | 15            |
| 680               | 850              | 23            |
| 850               | 3000             | 15            |

### **Sweep Test**

Sweep Testing: Sweep tested 5 MHz to 3 GHz.

### **Related Documents:**

No related documents are available for this product

### **Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color        | Notes | Item Desc             |
|---------------|----------|-------------|--------------|-------|-----------------------|
| 7710A B591000 | 1,000 FT | 259.000 LB  | BLACK, MATTE | С     | 3 #18 PE SH PVC FRTPE |
| 7710A B59500  | 500 FT   | 137.500 LB  | BLACK, MATTE | С     | 3 #18 PE SH PVC FRTPE |

### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 11-23-2011

© 2012 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge,

Page 3 of 4 01-06-2012

## **ENGLISH MEASUREMENT VERSION**



7710A Coax - RG-6/U Type

information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Page 4 of 4 01-06-2012