Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7808A Coax - RG-8X Type

For more Information please call

1-800-Belden1



Description:

RG-8X type, 15 AWG solid .057" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax AWG | | Stranding | Conductor Material | Dia. (in.) |
|------------|----|-----------|---------------------------|------------|
| 1 | 15 | Solid | BC - Bare Copper | .057 |

Insulation

Insulation Material:

| Insulation Material | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .150 |

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 0.240 in.

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -40°C To +75°C | |
|--|-----------------|--|
| Bulk Cable Weight: | 36 lbs/1000 ft. | |
| Max. Recommended Pulling Tension: | 74 lbs. | |
| Min. Bend Radius (Install)/Minor Axis: | 2.400 in. | |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| MII Order #39 (China RoHS): | Yes |
|---------------------------------------|------------|
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU CE Mark: | No |

Page 1 of 3 01-06-2012

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7808A Coax - RG-8X Type

| | RG Type: 8/X | |
|-----|------------------------|-------------------------------------|
| Su | itability | |
| | Suitability - Outdoor: | Yes |
| | Suitability - Aerial: | Yes - When supported by a messenger |
| | Suitability - Burial: | Yes |
| Ple | enum/Non-Plenum | |
| | Plenum (Y/N): | No |
| | | |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/ft) .060

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft) 23.0

Nominal Velocity of Propagation:

VP (%) 86

Nominal Delay:

Delay (ns/ft) 1.18

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.8

Maximum VSWR:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Max. VSWR |
|-------------|-------------|-------------------|------------------|-----------|
| | | 5 | 6000 | 1.25:1 |

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 30 | 1.3 |
| 50 | 1.6 |
| 150 | 2.8 |
| 220 | 3.4 |
| 450 | 4.9 |
| 900 | 7.0 |
| 1500 | 9.1 |
| 1800 | 10.1 |
| 2000 | 10.7 |
| 2500 | 12.0 |
| 3000 | 13.4 |
| 3500 | 14.6 |
| 4500 | 16.7 |
| 5800 | 19.5 |
| 6000 | 19.8 |

Max. Power Rating:

| Freq. (MHz) | Rating (W) | |
|-------------|------------|--|
| 30 | 1526 | |
| 50 | 1186 | |

Page 2 of 3 01-06-2012

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7808A Coax - RG-8X Type

| 150 | 673 |
|------|-----|
| 220 | 556 |
| 450 | 382 |
| 900 | 286 |
| 1500 | 205 |
| 1800 | 187 |
| 2000 | 177 |
| 2500 | 156 |
| 3000 | 143 |
| 3500 | 100 |
| 4500 | 116 |
| 5800 | 102 |
| 6000 | 100 |

Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

Sweep Test

Sweep Testing: 100% Sweep tested to 6 GHz.

Misc. Information (Overall)

Notes (Overall)

Notes: Belden® The Wire in Wireless®

Related Documents:

No related documents are available for this product

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|-------------------------------|
| 7808A 0101000 | 1,000 FT | 39.000 LB | BLACK | С | RF240 WIRELESS 50 OHM COAX PE |
| 7808A 010500 | 500 FT | 19.500 LB | BLACK | С | RF240 WIRELESS 50 OHM COAX PE |

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 09-30-2009

© 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, 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.