

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

7808A Coax - RG-8X Type



For more Information
please call

1-800-Belden1



General 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 |

Total Number of Conductors:

1

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 | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|---|--------------|
| 1 | Bonded Dufoil® | 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/Minor Axis: 2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|------------|
| EU Directive 2011/65/EU (RoHS II): | Yes |
| 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: | 8/X |

Suitability

Plenum/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.) |
|-------------|--------------------------|
| 5.000 | 0.580 |
| 10.000 | 0.770 |
| 30.000 | 1.300 |
| 50.000 | 1.600 |
| 150.000 | 2.800 |
| 220.000 | 3.400 |
| 450.000 | 4.900 |
| 900.000 | 7.000 |
| 1500.000 | 9.100 |
| 1800.000 | 10.100 |
| 2000.000 | 10.700 |
| 2500.000 | 12.000 |
| 3000.000 | 13.400 |
| 3500.000 | 14.600 |
| 4500.000 | 16.700 |
| 5800.000 | 19.500 |
| 6000.000 | 19.800 |

Max. Power Rating:

| Freq. (MHz) | Rating (W) |
|-------------|------------|
| 30.000 | 1526.000 |
| 50.000 | 1186.000 |
| 150.000 | 673.000 |
| 220.000 | 556.000 |
| 450.000 | 382.000 |
| 900.000 | 268.000 |
| 1500.000 | 205.000 |
| 1800.000 | 187.000 |
| 2000.000 | 177.000 |
| 2500.000 | 156.000 |
| 3000.000 | 143.000 |
| 3500.000 | 100.000 |
| 4500.000 | 116.000 |
| 5800.000 | 102.000 |
| 6000.000 | 100.000 |

Max. Operating Voltage - Non-UL:

| Voltage |
|---------|
| |

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300 V RMS

Sweep Test

Sweep Testing:

100^o; Sweep tested to 6 GHz.

Misc. Information (Overall)

Notes (Overall)

Notes: Belden® The Wire in Wireless®

Put Ups and Colors:

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

Notes:

C = CRATE REEL PUT-UP.

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