



For more Information
please call

1-800-Belden1



General Description:

Intermediate type, 13 AWG solid .072" 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. (mm) |
|--------|-----|-----------|--------------------|-----------|
| 1 | 13 | Solid | BC - Bare Copper | 1.8288 |

Total Number of Conductors: 1

Insulation

Insulation Material:

| Insulation Material | Dia. (mm) |
|---|-----------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 4.826 |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|---|--------------|
| 1 | Bonded Duofoil® | 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: 7.620 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 80.363 Kg/Km

Max. Recommended Pulling Tension: 600.507 N

Min. Bend Radius/Minor Axis: 76.200 mm

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

Series Type: RF 300

Suitability

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/m)

0.19686

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

75.463

Nominal Velocity of Propagation:

VP (%)

86

Nominal Delay:

Delay (ns/m)

3.83877

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

6.8901

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

7.8744

Maximum VSWR:

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

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 5.000 | 1.476 |
| 10.000 | 1.969 |
| 30.000 | 3.281 |
| 50.000 | 4.265 |
| 150.000 | 7.218 |
| 220.000 | 8.859 |
| 450.000 | 12.796 |
| 900.000 | 18.374 |
| 1500.000 | 23.951 |
| 1800.000 | 26.576 |
| 2000.000 | 28.217 |
| 2500.000 | 31.826 |
| 3000.000 | 35.435 |
| 3500.000 | 38.716 |
| 4500.000 | 44.294 |
| 5800.000 | 51.840 |
| 6000.000 | 52.496 |

Nom. Power Rating:

Freq. (MHz) Rating (W)

| | |
|------|------|
| 30 | 2161 |
| 50 | 1658 |
| 150 | 928 |
| 220 | 758 |
| 450 | 522 |
| 900 | 367 |
| 1500 | 278 |
| 1800 | 253 |
| 2000 | 239 |
| 2500 | 212 |
| 3000 | 194 |
| 3500 | 179 |
| 4500 | 157 |
| 5800 | 137 |
| 6000 | 135 |

Max. Power Rating:

| Freq. (MHz) | Rating (W) |
|-------------|------------|
| 30.000 | 2161.000 |
| 50.000 | 1658.000 |
| 150.000 | 928.000 |
| 220.000 | 758.000 |
| 450.000 | 522.000 |
| 900.000 | 367.000 |
| 1500.000 | 278.000 |
| 1800.000 | 253.000 |
| 2000.000 | 239.000 |
| 2500.000 | 212.000 |
| 3000.000 | 194.000 |
| 3500.000 | 179.000 |
| 4500.000 | 157.000 |
| 5800.000 | 137.000 |
| 6000.000 | 135.000 |

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: 100% Sweep Tested. 6 GHz. Belden® The Wire in Wireless®

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|--------|-------------|-------|-------|-------------------------------|
| 7809A 0101000 | 305 MT | 26.308 KG | BLACK | C | RF300 WIRELESS 50 OHM COAX PE |
| 7809A 010500 | 152 MT | 13.835 KG | BLACK | C | RF300 WIRELESS 50 OHM COAX PE |

Notes:
C = CRATE REEL PUT-UP.

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7809A Coax - Intermediate Type

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