Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7807A Coax - RG-58 Type

For more Information please call

1-800-Belden1



General Description:

RG-58 type, 17 AWG solid .044" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® (100% coverage) + tinned copper braid shield (95% coverage), polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 1 | 17 | Solid | BC - Bare Copper | .044 |

Total Number of Conductors:

Insulation

Insulation Material:

| Insulation Material | Dia. (in.) | |
|---|------------|--|
| Gas-injected FHDPE - Foam High Density Polyethylene | .116 | |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1 | Duofoil® | Таре | 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: 0.195 in.

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -40°C To +75°C | | |
|-----------------------------------|-----------------|--|--|
| Non-UL Temperature Rating: | 80°C | | |
| Bulk Cable Weight: | 27 lbs/1000 ft. | | |
| Max. Recommended Pulling Tension: | 25.400 lbs. | | |
| Min. Bend Radius/Minor Axis: | 2 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: | 58/U |
| Series Type: | RF 200 |
| | |

Suitability

Plenum/Non-Plenum

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| | Plenum (1 | r/N): | | | No | | | |
|-----|---|---|-------------|--------------------|---------------|--|--|--|
| Flo | etrical C | haractoristics | (Overal | II) | | | | |
| | lectrical Characteristics (Overall) lom. Characteristic Impedance: | | | | | | | |
| | Impedance | | | | | | | |
| | 50 | (/ | | | | | | |
| L | | | | | | | | |
| | m. Inductan | | | | | | | |
| | Inductance | (μΗ/π) | | | | | | |
| L | .061 | | | | | | | |
| No | m. Capacita | nce Conductor to | Shield: | | | | | |
| | Capacitanc | e (pF/ft) | | | | | | |
| | 23.5 | | | | | | | |
| No | minal Veloc | ity of Propagation | : | | | | | |
| _ | VP (%) | | | | | | | |
| | 85 | | | | | | | |
| No | minal Delay | | | | | | | |
| | Delay (ns/ft | _ | | | | | | |
| | 1.19 | 4 | | | | | | |
| L | | | | | | | | |
| | | or DC Resistance: | | | | | | |
| | | C (Ohm/1000 ft) | | | | | | |
| Į. | 3.3 | | | | | | | |
| | | Shield DC Resista | ince: | | | | | |
| | | C (Ohm/1000 ft) | | | | | | |
| | 4.2 | | | | | | | |
| Ma | ximum VSW | /R: | | | | | | |
| | Description | Freq. (MHz) Star | t Freq. (MH | Hz) Stop Freq. (MH | lz) Max. VSWR | | | |
| | | 5 | | 6000 | 1.25:1 | | | |
| No | m. Attenuat | ion: | | | | | | |
| | | Attenuation (dB/ | 100 ft \ | | | | | |
| | | | | | | | | |
| | 5.000 | | 100 11.) | | | | | |
| - 1 | 5.000 10.000 | 0.750 | 100 11.) | | | | | |
| ŀ | 10.000 | 0.750 | 100 11.) | | | | | |
| | 10.000 30.000 | 0.750 1.100 1.600 | 100 11.) | | | | | |
| | 10.000 30.000 50.000 | 0.750 1.100 1.600 2.100 | 100 11.) | | | | | |
| | 10.000 30.000 50.000 150.000 | 0.750 1.100 1.600 2.100 3.700 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 | 0.750 1.100 1.600 2.100 3.700 4.500 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 1800.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 1800.000 2000.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 1800.000 2000.000 2500.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 1800.000 2000.000 2500.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 1800.000 2000.000 2500.000 4500.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 | | | | | | |
| | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 2000.000 2500.000 3000.000 4500.000 5800.000 6000.000 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 3000.000 4500.000 5800.000 6000.000 xx. Power Ra | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 3000.000 4500.000 5800.000 6000.000 xx. Power Ra | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 900.000 1500.000 2500.000 3000.000 4500.000 5800.000 6000.000 xx. Power Ra Freq. (MHz) | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 3000.000 4500.000 5800.000 6000.000 x. Power Ra Freq. (MHz) | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 4500.000 4500.000 6000.000 tx. Power Ra Freq. (MHz) 30 50 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 4500.000 6000.000 0x. Power Ra Freq. (MHz) 30 50 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 220.000 450.000 900.000 1500.000 2500.000 2500.000 4500.000 6000.000 Ex. Power Ra Freq. (MHz) 30 50 150 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 450 372 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 1500.000 1500.000 2500.000 2500.000 3000.000 4500.000 6000.000 ax. Power Ra Freq. (MHz) 30 50 150 220 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 450 372 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 1500.000 1500.000 2000.000 2500.000 3000.000 4500.000 6000.000 Ex. Power Ra Freq. (MHz) 30 50 150 220 450 900 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 450 372 256 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 1500.000 1500.000 2500.000 2500.000 4500.000 6000.000 Ex. Power Ra Freq. (MHz) 30 50 150 220 450 900 1500 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 450 372 256 178 | | | | | | |
| Ma | 10.000 30.000 50.000 150.000 150.000 220.000 450.000 1500.000 1500.000 2500.000 2500.000 4500.000 6000.000 Ex. Power Ra Freq. (MHz) 30 50 150 220 450 900 1500 1800 | 0.750 1.100 1.600 2.100 3.700 4.500 6.500 9.200 12.000 13.200 14.000 15.700 17.500 22.000 25.200 26.000 tting: Rating (W) 1070 813 450 372 256 178 136 | | | | | | |

66 Max. Operating Voltage - Non-UL:

87

76

67

Voltage

3500 4500

5800

6000

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ENGLISH MEASUREMENT VERSION



7807A Coax - RG-58 Type

300 V RMS

Sweep Test

Sweep Testing: 100% Sweep tested to 6 GHz

Notes (Overall)

Notes: Belden® The Wire in Wireless®

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|-------------------------------|
| 7807A 0101000 | 1,000 FT | 26.000 LB | BLACK | С | RF200 WIRELESS 50 OHM COAX PO |
| 7807A 010500 | 500 FT | 15.000 LB | BLACK | С | RF200 WIRELESS 50 OHM COAX PO |

Notes: C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 07-19-2013

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