Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1506A Coax - RG-59/U Type

For more Information please call

1-800-Belden1



Description:

20 AWG solid .032" bare copper conductor, plenum, foam FEP insulation, Duofoil® + tinned copper braid shield (95% coverage), Flamarrest® jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|---------------------------|------------|
| 1 | 20 | Solid | BC - Bare Copper | .032 |

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Dia. (in.) |
|-----------------------|--------------------------------------------|------------|
| Teflon® | FFEP - Foam Fluorinated Ethylene Propylene | .133 |

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material |
|-------------------------|--------------------------|
| Flamarrest® | PVC - Polyvinyl Chloride |

Overall Cable

Overall Nominal Diameter: 0.196 in.

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -20°C To +75°C |
|----------------------------------------|-----------------|
| UL Temperature Rating: | 75°C |
| Bulk Cable Weight: | 29 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 52 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 2 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| NEC/(UL) Specification: | CMP |
|---------------------------------------|------------|
| CEC/C(UL) Specification: | CMP |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |

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| EU Directive 2003/11/EC (BFR): | Yes |
|-----------------------------------|----------|
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| RG Type: | 59/U |
| Flame Test | |
| UL Flame Test: | NFPA 262 |
| Suitability | |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | No |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | Yes |
| Non-Plenum Number: | 1505A |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:

| DCR @ 20°C | (Ohm/1000 ft) |
|------------|---------------|
| 10.0 | |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 f | t) |
|------------------------|----|
| 3.2 | _ |

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1 | .29 |
| 3.58 | .62 |
| 5 | .70 |
| 7 | .82 |
| 10 | 1.05 |
| 67.5 | 2.20 |
| 71.5 | 2.25 |
| 100 | 2.70 |
| 135 | 3.20 |
| 143 | 3.25 |
| 180 | 3.65 |
| 270 | 4.55 |
| 360 | 5.25 |
| 540 | 6.4 |
| 720 | 7.3 |
| 750 | 7.5 |

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| 1000 | 9.4 | |
|------|------|--|
| 1500 | 12.8 | |
| 2250 | 17.5 | |
| 3000 | 21.9 | |

Max. Operating Voltage - UL:

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 Return Loss:

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------------|------------------|--------------|
| 5.000 | 1600.000 | 23.000 |
| 1600.000 | 4500.000 | 21.000 |

Sweep Test

Sweep Testing: 100% 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 |
|---------------|----------|-------------|-------------|-------|--------------------|
| 1506A N3U1000 | 1,000 FT | 31.000 LB | GREEN, MIL | CZ | #20 FFEP SH FLMRST |
| 1506A 0011000 | 1,000 FT | 31.000 LB | BROWN | CZ | #20 FFEP SH FLMRST |
| 1506A 0021000 | 1,000 FT | 31.000 LB | RED | CZ | #20 FFEP SH FLMRST |
| 1506A 0031000 | 1,000 FT | 31.000 LB | ORANGE | Z | #20 FFEP SH FLMRST |
| 1506A 0041000 | 1,000 FT | 31.000 LB | YELLOW | Z | #20 FFEP SH FLMRST |
| 1506A 0061000 | 1,000 FT | 31.000 LB | BLUE, LIGHT | CZ | #20 FFEP SH FLMRST |
| 1506A 0071000 | 1,000 FT | 31.000 LB | VIOLET | CZ | #20 FFEP SH FLMRST |
| 1506A 0081000 | 1,000 FT | 31.000 LB | GRAY | Z | #20 FFEP SH FLMRST |
| 1506A 0101000 | 1,000 FT | 31.000 LB | BLACK | С | #20 FFEP SH FLMRST |
| 1506A 010500 | 500 FT | 16.500 LB | BLACK | CZ | #20 FFEP SH FLMRST |
| 1506A 8771000 | 1,000 FT | 31.000 LB | NATURAL | С | #20 FFEP SH FLMRST |
| 1506A 877500 | 500 FT | 16.500 LB | NATURAL | CZ | #20 FFEP SH FLMRST |

Notes:

C = CRATE REEL PUT-UP

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 5 Revision Date: 11-28-2011

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