

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

1506A Coax - RG-59/U Type



For more Information
please call

1-800-Belden1



General 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. (mm)
1	20	Solid	BC - Bare Copper	0.8128

Total Number of Conductors:

1

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	3.3782

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:

4.978 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 43.158 Kg/Km

Max. Recommended Pulling Tension: 302.478 N

Min. Bend Radius/Minor Axis: 50.800 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
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
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

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

1506A Coax - RG-59/U Type

Flame Test

UL Flame Test: NFPA 262

CSA Flame Test: FT6

Suitability

Suitability - Indoor: Yes

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 1505A

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μ H/m)
0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.8241

Nominal Velocity of Propagation:

VP (%)
84

Nominal Delay:

Delay (ns/m)
3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
32.81

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
10.4992

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.95149
3.58	2.03422
5	2.2967
7	2.69042
10	3.44505
67.5	7.2182
71.5	7.38225
100	8.8587
135	10.4992
143	10.6633
180	11.9757
270	14.9286
360	17.2252
540	20.9984
720	23.9513
750	24.6075
1000	30.8414
1500	41.9968
2250	57.4175
3000	71.8539

Max. Operating Voltage - UL:

Voltage
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)

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

1506A Coax - RG-59/U Type

5.000	1600.000	23.000
1600.000	4500.000	21.000

Sweep Test

Sweep Testing:

100#37; Sweep tested 5 MHz to 3 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1506A N3U1000	1,000 FT	31.000 LB	GREEN, MIL	C Z	#20 FFEP SH FLMRST
1506A 0011000	1,000 FT	31.000 LB	BROWN	C Z	#20 FFEP SH FLMRST
1506A 0021000	1,000 FT	31.000 LB	RED	C Z	#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	C Z	#20 FFEP SH FLMRST
1506A 0071000	1,000 FT	31.000 LB	VIOLET	C Z	#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	C	#20 FFEP SH FLMRST
1506A 010500	500 FT	16.500 LB	BLACK	C Z	#20 FFEP SH FLMRST
1506A 8771000	1,000 FT	31.000 LB	NATURAL	C	#20 FFEP SH FLMRST
1506A 877500	500 FT	16.500 LB	NATURAL	C Z	#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: 07-29-2013

© 2015 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.