# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



# 1505A Coax - RG-59/U Type



For more Information please call

1-800-Belden1





# Description

20 AWG solid .032" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

# **Physical Characteristics (Overall):**

#### **Conductor:**

**AWG** 

# Coax	Coax AWG Stranding		Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	0.032

#### Insulation:

Insulation Material

Ins Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	0.145

#### **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
PVC - Polyvinyl Chloride

#### **Overall Cabling:**

Overall Nominal Diameter: .233 in.

# **Mechanical Characteristics (Overall):**

Operating Temperature Range	-30°C To +75°C
UL Temperature Rating	75°C
Bulk Cable Weight:	31 lbs/1000 ft.
Max. Recommended Pulling Tension:	47 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.500 in.

### **Applicable Specifications and Agency Compliance (Overall):**

# **Applicable Standards:**

Flame Test:	
RG Type	59/U
EU RoHS Compliance Date (mm/dd/yyyy)	01/01/2005
EU RoHS Compliant (Y/N)	Yes
EU CE Mark (Y/N)	Yes
CEC/C(UL) Specification	CMG
NEC/(UL) Specification	CMR

UL1666 Vertical Shaft

#### Suitability:

**UL Flame Test** 

Page 1 of 4 02-15-200

# **Detailed Specifications & Technical Data ENGLISH MEASUREMENT VERSION**



# 1505A Coax - RG-59/U Type

Suitability - Indoor	Yes			
Suitability - Outdoor	Yes - Black only			
Suitability - Aerial	Yes - Black only, when supported by a messenger wire	Yes - Black only, when supported by a messenger wire		
Plenum/Non-Plenum:				
Plenum (Y/N)	N			
Plenum Number	1506A			

# **Electrical Characteristics (Overall):**

Nom. Characteristic Impedance

Impedance (Ohm) 75.000

Nom. Inductance

Inductance (µH/ft) 0.107

Nom. Capacitance Conductor to Shield

Capacitance (pF/ft) 16.300

Nominal Velocity of Propagation

83

Nominal Delay

Delay (ns/ft) 1.220

Nom. Conductor DC Resistance

DCR @ 20°C (Ohm/1000 ft)

Nominal Outer Shield DC Resistance

DCR @ 20°C (Ohm/1000 ft) 3.800

Nom. Attenuation

Description Fre	eq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1.000			0.300
3	3.600			0.600
	5.000			0.630
7	7.000			0.740
1	0.000			0.900
6	7.500			2.050
7	1.500			2.100
8	8.500			2.200
10	00.000			2.300
13	35.000			2.700
14	43.000			2.800
18	30.000			3.100
27	70.000			3.800
36	30.000			4.400
54	40.000			5.500
72	20.000			6.400
75	50.000			6.500
10	00.000			7.600
15	00.000			9.300
20	00.000			10.900
22	50.000			11.600
30	00.000			13.400
45	00.000			16.400

# **Detailed Specifications & Technical Data ENGLISH MEASUREMENT VERSION**



1505A Coax - RG-59/U Type

Max. Operating Voltage - UL

Voltage 300 V RMS

Other Electrical Characteristic 1

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms

Other Electrical Characteristic 2

Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

Minimum Return Loss

Description	Freq. (MHz)	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 4.5 GHz.

#### Notes (Overall):

Notes

Also available in bundled versions. See 7794A through 7798A.

#### **PUT UPS AND COLORS:**

Item #	Putup	Ship Weight	Jacket Color	Notes	Item Desc
1505A 0011000	1,000 FT	35.000 LB	BROWN	С	#20 PE/GIFHDPE SH FR PVC BRN
1505A 0015000	5,000 FT	165.000 LB	BROWN	CN	#20 PE/GIFHDPE SH FR PVC BRN
1505A 0021000	1,000 FT	35.000 LB	RED	С	#20 PE/GIFHDPE SH FR PVC RED
1505A 002500	500 FT	15.500 LB	RED	С	#20 PE/GIFHDPE SH FR PVC RED
1505A 0025000	5,000 FT	165.000 LB	ORANGE	CN	#20 PE/GIFHDPE SH FR PVC RED
1505A 0031000	1,000 FT	35.000 LB	ORANGE	С	#20 PE/GIFHDPE SH FR PVC ORG
1505A 0035000	5,000 FT	165.000 LB	ORANGE	CN	#20 PE/GIFHDPE SH FR PVC ORG
1505A 0041000	1,000 FT	35.000 LB	YELLOW	С	#20 PE/GIFHDPE SH FR PVC YEL
1505A 0045000	5,000 FT	165.000 LB	YELLOW	CN	#20 PE/GIFHDPE SH FR PVC YEL
1505A 0061000	1,000 FT	35.000 LB	BLUE, LIGHT	С	#20 PE/GIFHDPE SH FR PVC BLULT
1505A 006500	500 FT	15.500 LB	BLUE, LIGHT	С	#20 PE/GIFHDPE SH FR PVC BLULT
1505A 0065000	5,000 FT	165.000 LB	BLUE, LIGHT	CN	#20 PE/GIFHDPE SH FR PVC BLULT
1505A 0071000	1,000 FT	35.000 LB	VIOLET	С	#20 PE/GIFHDPE SH FR PVC VIO
1505A 0075000	5,000 FT	165.000 LB	VIOLET	CN	#20 PE/GIFHDPE SH FR PVC VIO
1505A 0081000	1,000 FT	35.000 LB	GRAY	С	#20 PE/GIFHDPE SH FR PVC GRY
1505A 0085000	5,000 FT	165.000 LB	GRAY	CN	#20 PE/GIFHDPE SH FR PVC GRY
1505A 0091000	1,000 FT	35.000 LB	WHITE	С	#20 PE/GIFHDPE SH FR PVC WHT
1505A 0095000	5,000 FT	165.000 LB	WHITE	CN	#20 PE/GIFHDPE SH FR PVC WHT
1505A 0101000	1,000 FT	35.000 LB	BLACK	С	#20 PE/GIFHDPE SH FR PVC BLK
1505A 010500	500 FT	15.500 LB	BLACK	С	#20 PE/GIFHDPE SH FR PVC BLK
1505A 0105000	5,000 FT	165.000 LB	BLACK	CN	#20 PE/GIFHDPE SH FR PVC BLK
1505A N3U1000	1,000 FT	35.000 LB	GREEN, MIL	С	#20 PE/GIFHDPE SH FR PVC GRNML
1505A N3U5000	5,000 FT	165.000 LB	GREEN, MIL	CN	#20 PE/GIFHDPE SH FR PVC GRNML

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Revision Number: 6 Revision Date: 05-14-2007

# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



1505A Coax - RG-59/U Type

© 2007 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 the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs.(San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory; and China Ministry of Information Industry order#39 (China RoHS). EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); EU BFR (Directive 2003/11/EC, 6-Feb-2003). 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 the 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.

Page 4 of 4 02-15-200