# **Detailed Specifications & Technical Data**

## **ENGLISH 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.

1

# **Physical Characteristics (Overall)**

# Conductor

AWG:

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

Total Number of Conductors:

#### 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:	68 lbs.
Min. Bend Radius/Minor Axis:	2 in.

# **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

Page 1 of 3 01-05-2017

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NFPA 262			
FT6			
Suitability			
Yes			
Yes			
1505A			
_	Yes Yes		

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 75

Nom. Inductance:

Inductance (µH/ft) 0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.1

Nominal Velocity of Propagation:

**VP (%)** 84

Nominal Delay:

Delay (ns/ft) 1.21

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 10.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.2

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.290
3.580	0.620
5.000	0.700
7.000	0.820
10.000	1.050
67.500	2.200
71.500	2.250
100.000	2.700
135.000	3.200
143.000	3.250
180.000	3.650
270.000	4.550
360.000	5.250
540.000	6.400
720.000	7.300
750.000	7.500
1000.000	9.000
1500.000	11.300
2250.000	14.400
3000.000	17.200

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)

Page 2 of 3 01-05-2017

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5.000	1600.000	23.000
1600.000	4500.000	21.000

#### Sweep Test

100% Sweep tested 5 MHz to 3 GHz Sweep Testing:

### **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.

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product.
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Page 3 of 3