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.

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
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Flame Test				
UL Flame Test:	NFPA 262			
CSA Flame Test:	FT6			
Suitability	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 (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	.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
1000	9.4
1500	12.8
2250	17.5
3000	21.9

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)

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

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