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.

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Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.8128

Total Number of Conductors:

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

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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
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:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 52.8241

Nominal Velocity of Propagation:



Nominal Delay:



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

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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)
5.000	1600.000	23.000
1600.000	4500.000	21.000

Sweep Test

Sweep Testing:

100% Sweep tested 5 MHz to 3 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1506A N3U1000	305 MT	14.061 KG	GREEN, MIL	CZ	#20 FFEP SH FLMRST
1506A 0011000	305 MT	14.061 KG	BROWN	CZ	#20 FFEP SH FLMRST
1506A 0021000	305 MT	14.061 KG	RED	CZ	#20 FFEP SH FLMRST
1506A 0031000	305 MT	14.061 KG	ORANGE	Z	#20 FFEP SH FLMRST
1506A 0041000	305 MT	14.061 KG	YELLOW	Z	#20 FFEP SH FLMRST
1506A 0061000	305 MT	14.061 KG	BLUE, LIGHT	CZ	#20 FFEP SH FLMRST
1506A 0071000	305 MT	14.061 KG	VIOLET	CZ	#20 FFEP SH FLMRST
1506A 0081000	305 MT	14.061 KG	GRAY	Z	#20 FFEP SH FLMRST
1506A 0101000	305 MT	14.061 KG	BLACK	С	#20 FFEP SH FLMRST
1506A 010500	152 MT	7.484 KG	BLACK	CZ	#20 FFEP SH FLMRST
1506A 8771000	305 MT	14.061 KG	NATURAL	С	#20 FFEP SH FLMRST
1506A 877500	152 MT	7.484 KG	NATURAL	CZ	#20 FFEP SH FLMRST
1000/101/000	.02	1			#2011 E 0111 E 1111

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

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