

1505F Coax - RG-59/U Type

For more Information
please call

1-800-Belden1

**General Description:**

22 AWG stranded (7x29) .031" bare compacted copper conductor, gas-injected foam HDPE insulation, tinned copper double braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	22	7x29	BCC - Bare Compacted Copper	0.7874

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.683

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)	Dia. (mm)	Description
1	Braid	TC - Tinned Copper	95.000	4.242	Layer 1
2	Braid	TC - Tinned Copper	95.000	4.801	Layer 2

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 6.147 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-35°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	61.016 Kg/Km
Max. Recommended Pulling Tension:	400.338 N
Min. Bend Radius/Minor Axis:	63.500 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
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):	01/01/2005

EU Directive 2002/96/EC (WEEE):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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Flame Test

UL Flame Test:	UL1581 Vertical Tray
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Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)**Nom. Characteristic Impedance:**

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/m)

0.308414

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

55.777

Nominal Velocity of Propagation:

VP (%)

80

Nominal Delay:

Delay (ns/m)

4.2653

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

40.0282

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

7.8744

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
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1.000	0.656
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3.600	1.641
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5.000	1.969
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6.000	2.198
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7.000	2.395
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10.000	2.953
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12.000	3.215
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25.000	4.725
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67.500	7.874
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71.500	8.203
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88.500	9.187
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100.000	9.843
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135.000	11.484
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143.000	11.812
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180.000	13.452
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270.000	16.733
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360.000	19.686
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540.000	24.279
720.000	28.545
1000.000	34.451
750.000	29.201
1500.000	43.637
2000.000	51.512
2250.000	55.449
3000.000	66.604

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.

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:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	850.000	20.000
851.000	4500.000	15.000

Sweep Test**Sweep Testing:**

100% Sweep tested 5 MHz to 4.5 GHz.

Notes (Overall)

Notes: Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1505F B591000	305 MT	20.412 KG	BLACK, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7V1000	305 MT	20.412 KG	RED, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7W1000	305 MT	20.412 KG	GREEN, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7X1000	305 MT	20.412 KG	BLUE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7Y1000	305 MT	20.412 KG	WHITE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G8L1000	305 MT	20.412 KG	ORANGE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F Z4B1000	305 MT	20.412 KG	VIO Z4B		#21 GIFHDLDPPE DBLB PVC
1505F 0041000	305 MT	20.412 KG	YELLOW	C	#21 GIFHDLDPPE DBLB PVC

Notes:

C = CRATE REEL PUT-UP.

Test Reports**a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

Revision Number: 9 Revision Date: 08-13-2012

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