

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. (in.)
1	22	7x29	BCC - Bare Compacted Copper	.031

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.145

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)	Dia. (in.)	Description
1	Braid	TC - Tinned Copper	95.000	0.167	Layer 1
2	Braid	TC - Tinned Copper	95.000	0.189	Layer 2

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.242 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -35°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 41 lbs/1000 ft.

Max. Recommended Pulling Tension: 90 lbs.

Min. Bend Radius/Minor Axis: 2.500 in.

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

NEC/(UL) Specification: CM

CEC/C(UL) Specification: CM

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):	01/01/2005
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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/ft)

0.094

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

17.0

Nominal Velocity of Propagation:

VP (%)

80

Nominal Delay:

Delay (ns/ft)

1.3

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

12.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.4

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
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1.000	0.200
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3.600	0.500
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5.000	0.600
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6.000	0.670
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7.000	0.730
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10.000	0.900
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12.000	0.980
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25.000	1.440
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67.500	2.400
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71.500	2.500
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88.500	2.800
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100.000	3.000
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135.000	3.500
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143.000	3.600
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180.000	4.100
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270.000	5.100
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360.000	6.000
540.000	7.400
720.000	8.700
1000.000	10.500
750.000	8.900
1500.000	13.300
2000.000	15.700
2250.000	16.900
3000.000	20.300

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	1,000 FT	45.000 LB	BLACK, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7V1000	1,000 FT	45.000 LB	RED, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7W1000	1,000 FT	45.000 LB	GREEN, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7X1000	1,000 FT	45.000 LB	BLUE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G7Y1000	1,000 FT	45.000 LB	WHITE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F G8L1000	1,000 FT	45.000 LB	ORANGE, MATTE	C	#21 GIFHDLDPPE DBLB PVC
1505F Z4B1000	1,000 FT	45.000 LB	VIO Z4B		#21 GIFHDLDPPE DBLB PVC
1505F 0041000	1,000 FT	45.000 LB	YELLOW	C	#21 GIFHDLDPPE DBLB PVC

Notes:

C = CRATE REEL PUT-UP.

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