

## 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 (%)
1	Braid	TC - Tinned Copper	95.000
2	Braid	TC - Tinned Copper	95.000

**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:	88 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
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: UL1685 UL Loading

Suitability

Suitability - Indoor: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

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.)
1.000	0.200
3.600	0.500
5.000	0.600
6.000	0.670
7.000	0.730
10.000	0.900
12.000	0.980
25.000	1.440
67.500	2.400
71.500	2.500
88.500	2.800
100.000	3.000
135.000	3.500
143.000	3.600
180.000	4.100
270.000	5.100
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
4500.000	28.200

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.

**1505F Coax - RG-59/U Type****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 GIFHDLPE DBLB PVC
1505F G7V1000	1,000 FT	45.000 LB	RED, MATTE	C	#21 GIFHDLPE DBLB PVC
1505F G7W1000	1,000 FT	45.000 LB	GREEN, MATTE	C	#21 GIFHDLPE DBLB PVC
1505F G7X1000	1,000 FT	45.000 LB	BLUE, MATTE	C	#21 GIFHDLPE DBLB PVC
1505F G7Y1000	1,000 FT	45.000 LB	WHITE, MATTE	C	#21 GIFHDLPE DBLB PVC
1505F G8L1000	1,000 FT	45.000 LB	ORANGE, MATTE	C	#21 GIFHDLPE DBLB PVC
1505F Z4B1000	1,000 FT	45.000 LB	VIO Z4B		#21 GIFHDLPE DBLB PVC
1505F 0041000	1,000 FT	45.000 LB	YELLOW	C	#21 GIFHDLPE DBLB PVC

**Notes:**

C = CRATE REEL PUT-UP.

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