

1505F Coax - RG-59/U Type



For more Information
please call

1-800-Belden1

**Description:**

22 AWG stranded (7x29) .031" bare compacted copper conductor, gas-injected foam HDPE insulation, tinned copper/bare 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

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	94	4.2418	Layer 1
2	Braid	TC - Tinned Copper	94	4.8006	Layer 2

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

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:	59.528 Kg/Km
Max. Recommended Pulling Tension:	400.338 N
Min. Bend Radius (Install)/Minor Axis:	60.960 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

1505F Coax - RG-59/U Type

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
-----------------------	-----

Suitability - Outdoor:	Yes - Black Only
------------------------	------------------

Suitability - Aerial:	Yes - Black only, when supported by a messenger wire
-----------------------	--

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

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)
-------------	-----------------------

1	0.6562
---	--------

3.6	1.6405
-----	--------

5	1.9686
---	--------

7	2.39513
---	---------

10	2.9529
----	--------

67.5	7.8744
------	--------

71.5	8.2025
------	--------

88.5	9.1868
------	--------

100	9.843
-----	-------

135	11.4835
-----	---------

143	11.8116
-----	---------

180	13.4521
-----	---------

270	16.7331
-----	---------

360	19.686
-----	--------

540	24.2794
-----	---------

720	28.5447
-----	---------

750	29.2009
1000	34.4505
1500	43.6373
2000	51.5117
2250	55.4489
3000	66.6043

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:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	3000	15

Sweep Test

Sweep Testing: 100% Sweep tested 5 MHz to 3 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.

Revision Number: 7 Revision Date: 05-14-2007

© 2008 Belden, Inc
 All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the 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.