Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

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 1 22 7x29 BCC - Bare Compacted Copper	Dia. (in.) .031
Total Number of Conductors:	1
Insulation	
Insulation Material:	
	ia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene .14	15
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 Complia	ince (Overall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	СМ
CEC/C(UL) Specification:	СМ
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

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UL Flam	e Test:	UL1685 UL Loading
itability		
-	ty - Indoor:	Yes
	-	
	n-Plenum	
Plenum	(Y/N):	No
ectrical C	Characteristics (Ov	erall)
	teristic Impedance:	
Impedance 75		
om. Inducta		
Inductanc 0.094	e (µn/π)	
-	ance Conductor to Shield	t.
Capacitan 17.0	ce (pF/ft)	
	city of Propagation:	
VP (%)		
80		
ominal Dela	y:	
Delay (ns/	ft)	
1.3		
om. Conduc	tor DC Resistance:	
	°C (Ohm/1000 ft)	
12.2	. ,	
minal Outr	er Shield DC Resistance:	
	°C (Ohm/1000 ft)	
2.4		
om. Attenua		
	z) Attenuation (dB/100 ft.	
1.000	0.200	_
3.600	0.500	_
5.000	0.600	-
6.000 7.000	0.670	-
10.000	0.730	-
12.000	0.900	-
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	-
1	4.100	-
180.000	5.100	-
180.000 270.000		-
270.000	6.000	
270.000 360.000	6.000 7.500	-
270.000	6.000 7.500 8.900	-
270.000 360.000 540.000 720.000	7.500 8.900	-
270.000 360.000 540.000 720.000 750.000	7.500 8.900 9.100	- - - -
270.000 360.000 540.000 720.000 750.000 1000.000	7.500 8.900 9.100 10.800	- - - - -
270.000 360.000 540.000 720.000 750.000 1000.000 1500.000	7.500 8.900 9.100 10.800 13.600	
270.000 360.000 540.000 720.000 750.000 1000.000	7.500 8.900 9.100 10.800	
270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 2000.000	7.500 8.900 9.100 10.800 13.600 16.100	
270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 2000.000 2250.000	7.500 8.900 9.100 10.800 13.600 16.100 17.300	
270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 2250.000 3000.000 4500.000	7.500 8.900 9.100 10.800 13.600 16.100 17.300 20.700 26.700	
270.000 360.000 540.000 720.000 750.000 1000.000 1500.000 2250.000 3000.000 4500.000	7.500 8.900 9.100 10.800 13.600 16.100 17.300 20.700	

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination.

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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

100% Sweep tested 5 MHz to 4.5 GHz.

Notes (Overall)

Sweep Test Sweep Testing:

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

Notes: C = CRATE REEL PUT-UP.

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