Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

7977WB Coax - Low Loss 50 Ohm Wireless RF Transmission Cable

For more Information please call

1-800-Belden1

Description:

5.5 AWG solid .176" bare copper-covered aluminum conductor, foam HDPE insulation, Duobond® II (100% coverage) plus a tinned copper braid shield (85% coverage), flooded water-resistant polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	5.5	Solid	BCCA - Bare Copper Covered Aluminum	.176

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FHDPE - Foam High Density Polyethylene	.455

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	85

Outer Shield Flooding Grease:	PO - Polyolefin

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter:	0.590 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	163 lbs/1000 ft.
Max. Recommended Pulling Tension:	290 lbs.
Min. Bend Radius (Install)/Minor Axis:	5.900 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU CE Mark:	No
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
Series Type:	RF 600

Suitability

Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - when supported by a messenger wire
Suitability - Burial:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
0.060

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
24.6

Nominal Velocity of Propagation:

VP (%)
85

Nominal Delay:

Delay (ns/ft)
1.19

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
.53

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.8

Maximum VSWR:

Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
5.000	2690.000	1.25:1
2690.000	3290.000	2.00:1
3290.000	6000.000	1.43:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
30	.46
50	.61
150	.98
220	1.18
450	1.72
900	2.54
1500	3.40
1800	3.77
2000	4.01
2500	4.58
3000	5.07
3500	5.56
4500	6.44

5800	7.56
6000	7.75

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	5057
220	1975
450	1353
900	921
1500	691
1800	623
2000	587
3500	425
4500	368
5800	315
6000	308

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Notes (Overall)

Notes: 100% Sweep tested. Belden® The Wire in Wireless®

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7977WB 0101000	1,000 FT	146.000 LB	BLACK	C	#5H GIFPE SH LDPE
7977WB 010500	500 FT	74.000 LB	BLACK	C	#5H GIFPE SH LDPE

Notes:
C = CRATE REEL PUT-UP.

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