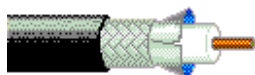


## 7977A Coax - Low Loss 50 Ohm Wireless RF Transmission Cable



For more Information  
please call

1-800-Belden1

**General 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), polyethylene jacket.

**Physical Characteristics (Overall)****Conductor**

AWG:

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

Total Number of Conductors: 1

**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 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:	130 lbs/1000 ft.
Max. Recommended Pulling Tension:	290 lbs.
Min. Bend Radius/Minor Axis:	6 in.

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

EU Directive 2011/65/EU (ROHS II):	Yes
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

## 7977A Coax - Low Loss 50 Ohm Wireless RF Transmission Cable

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

### 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

## 7977A Coax - Low Loss 50 Ohm Wireless RF Transmission Cable

## Max. Power Rating:

Freq. (MHz)	Rating (W)
30.000	5057.000
220.000	1975.000
450.000	1353.000
900.000	921.000
1500.000	691.000
1800.000	623.000
2000.000	587.000
3500.000	425.000
4500.000	368.000
5800.000	315.000
6000.000	308.000

## Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

## Notes (Overall)

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

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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Revision Number: 4      Revision Date: 01-06-2014

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