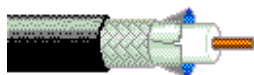


7977R Coax - Low Loss 50 Ohm Wireless RF Transmission Cable



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), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	5.5	Solid	BCCA - Bare Copper Covered Aluminum	4.4704

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
FHDPE - Foam High Density Polyethylene	11.557

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
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 14.986 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 238.112 Kg/Km

Max. Recommended Pulling Tension: 1289.978 N

Min. Bend Radius/Minor Axis: 152.400 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

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

METRIC MEASUREMENT VERSION

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

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

Flame Test

UL Flame Test: UL1666 Vertical Shaft

CSA Flame Test: FT4

Suitability

Suitability - Indoor: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance ($\mu\text{H}/\text{m}$)

0.19686

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

80.7126

Nominal Velocity of Propagation:

VP (%)

84

Nominal Delay:

Delay (ns/m)

3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

1.73893

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

5.9058

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/100m)
30	1.50926
50	2.00141
150	3.21538
220	3.87158
450	5.64332
900	8.33374
1500	11.1554
1800	12.3694
2000	13.1568

METRIC MEASUREMENT VERSION

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

2500	15.027
3000	16.6347
3500	18.2424
4500	21.1296
5800	24.8044
6000	25.4278

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 - 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
7977R 0101000	305 MT	78.925 KG	BLACK	C	#5 FPE SH FRPVC
7977R 010500	152 MT	40.824 KG	BLACK	C	#5 FPE SH FRPVC

Notes:

C = CRATE REEL PUT-UP.

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