Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

7806R Coax - RG-58 Type

For more Information
please call

1-800-Belden1

General Description:

RG-58 type, 19 AWG solid .037" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® (100% coverage) + tinned copper braid shield (90% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	19	Solid	BC - Bare Copper	0.9398

Total Number of Conductors:	1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	2.794

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	90

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter:	4.953 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	40.181 Kg/Km
Max. Recommended Pulling Tension:	177.928 N
Min. Bend Radius/Minor Axis:	44.450 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
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):	01/01/2004

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:	58/U
Series Type:	RF 195

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/m)
0.209984

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
79.7283

Nominal Velocity of Propagation:

VP (%)
77

Nominal Delay:

Delay (ns/m)
4.16687

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
24.9356

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
13.7802

Maximum VSWR:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5.000	2.461
10.000	3.281
30.000	6.562
50.000	8.203
150.000	13.124
220.000	16.077
450.000	23.295
900.000	33.794
1500.000	44.950

1800.000	49.871
2000.000	52.824
2500.000	60.042
3000.000	67.261
4500.000	86.947
5800.000	102.367
6000.000	104.992

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	890
50	694
150	403
220	336
450	231
900	162
1500	124
1800	113
2000	107
2500	95
3000	87
3500	80
4500	70
5800	62
6000	61

Max. Operating Voltage - UL:

Voltage
300 V RMS

Notes (Overall)

Notes: 100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7806R 0101000	305 MT	12.701 KG	BLACK	C	RF195 WIRELESS 50OHM COAXFRPVC
7806R 010500	152 MT	7.484 KG	BLACK	C	RF195 WIRELESS 50OHM COAXFRPVC

Notes:
C = CRATE REEL PUT-UP.

Test Reports

a) UL
i) UL Test Reports are available on-line through the UL Client Document Access web portal.
ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA
i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

Revision Number: 5 Revision Date: 08-10-2012

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.