# **Detailed Specifications & Technical Data**





# 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)	
Physical Characteristics (Overall) Conductor	
AWG:	
# Coax AWG Stranding Conductor Material Dia. (mm)	
119SolidBC - Bare Copper0.9398	
Total Number of Conductors:	1
Insulation Insulation Material:	
	a. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene 2.	794
Outer Shield Outer Shield Material:	
Layer # Outer Shield Trade Name Type Outer Shield M	
	Polyester Tape-Aluminum Foil 100
2 Braid TC - Tinned Cop	pper 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 Com	pliance (Overall)
Applicable Standards & Environmental Program	IS
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

# **Detailed Specifications & Technical Data**

### METRIC MEASUREMENT VERSION



# 7806R Coax - RG-58 Type

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 (μΗ/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

# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



### 7806R Coax - RG-58 Type

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	С	RF195 WIRELESS 500HM COAXFRPVC
7806R 010500	152 MT	7.484 KG	BLACK	С	RF195 WIRELESS 500HM 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) CŚA

i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.

ií) 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

© 2012 Belden. Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and



METRIC MEASUREMENT VERSION

### 7806R Coax - RG-58 Type

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.