Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7805 Coax - RG-174 Type

For more Information please call

1-800-Belden1



General Description:

RG-174 type, 25 AWG solid .018" bare copper conductor, solid polyethylene insulation, Beldfoil® + tinned copper braid shield (90% coverage), PVC jacket.

1

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	25	Solid	BC - Bare Copper	0.4572

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
PE - Polyethylene	1.5494

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 2.794 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	13.394 Kg/Km
Max. Recommended Pulling Tension:	71.171 N
Min. Bend Radius/Minor Axis:	31.750 mm

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):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes

Page 1 of 3 12-30-2012

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7805 Coax - RG-174 Type

CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	174/U
Series Type:	RF 100
Suitability	
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/m) 0.252637

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 102.367

Nominal Velocity of Propagation:

VP (%) 66

Nominal Delay:

Delay (ns/m) 5.05274

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 104.992

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 29.8571

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	4.922
10.000	7.218
30.000	12.468
50.000	16.077
150.000	28.217
220.000	34.122
450.000	49.871
900.000	72.182
1500.000	94.165
1800.000	104.008
2000.000	109.585
2500.000	124.022
3000.000	137.802
3500.000	148.957
4500.000	171.596
5800.000	199.813
6000.000	203.422

Page 2 of 3 12-30-2012

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7805 Coax - RG-174 Type

Nom. Power Rating:

Start Freq. (MHz)	Rating (W)
30	216
50	154
150	74
220	57
450	34
900	21
1500	14
1800	13
2000	12
2500	10
3000	9
3500	8
4500	7
5800	5
6000	5

Max. Operating Voltage - Non-UL:

Voltage 1100 V RMS

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7805 010100	30 MT	0.771 KG	BLACK	E	RF100 WIRELESS 50 OHM COAX PVC
7805 0101000	305 MT	4.536 KG	BLACK		RF100 WIRELESS 50 OHM COAX PVC
7805 010500	152 MT	2.495 KG	BLACK		RF100 WIRELESS 50 OHM COAX PVC

Notes:

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

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.

Revision Number: 3 Revision Date: 08-21-2012

© 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 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

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