



Product: [7805R](#)

50 Ohm Wireless Transmission Coax, RF 100, RG174, 25 AWG Solid BC, Foil + 90% TC Braid, PVC Jkt, CMR

Product Description

50 Ohm Wireless Transmission Coax, RF 100, RG174, 25 AWG Solid Bare Copper Conductor, PE Insulation, Beldfoil® + 90% Tinned Copper Braid Shield, PVC Jacket, CMR

Technical Specifications

Product Overview

Suitable Applications:	Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification)
------------------------	--

Construction Details

RG Type:	174
----------	-----

Conductor

AWG	Stranding	Nom. Diameter	Material
25	Solid	0.020 in	BC - Bare Copper

Insulation

Material	Nom. Diameter
PE - Polyethylene (Foam)	0.060 in

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%
2	Braid	Tinned Copper (TC)		90%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.110 in

Electrical Characteristics

VSWR

Frequency [MHz]	Max. VSWR
5 - 6000 MHz	1.25:1

Attenuation

Frequency	Nom. Attenuation [dB/100ft]
5 MHz	1.4 dB/100ft
10 MHz	2 dB/100ft
30 MHz	3.5 dB/100ft
50 MHz	4.6 dB/100ft
150 MHz	8.0 dB/100ft
220 MHz	9.6 dB/100ft
450 MHz	14.0 dB/100ft
900 MHz	20.2 dB/100ft
1500 MHz	26.6 dB/100ft

1800 MHz	29.5 dB/100ft
2000 MHz	31.2 dB/100ft
2500 MHz	35.4 dB/100ft
3000 MHz	39.4 dB/100ft
3500 MHz	43.0 dB/100ft
4500 MHz	50.0 dB/100ft
5800 MHz	59.0 dB/100ft
6000 MHz	60.6 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]
30 MHz	216 W
50 MHz	154 W
150 MHz	74 W
220 MHz	57 W
450 MHz	34 W
900 MHz	21 W
1,500 MHz	14 W
2,000 MHz	12 W
2,500 MHz	10 W
3,500 MHz	8 W
4,500 MHz	7 W
6,000 MHz	5 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity
27.3 Ohm/1000ft	9.3 Ohm/1000ft	26.2 pF/ft	50 Ohm	74%

Voltage

UL Voltage Rating
300 V (CMR, CMG)

Mechanical Characteristics

Temperature

UL Rating	Operating
60°C	-30°C to +75°C

Bulk Cable Weight:	9 lbs/1000ft
Max. Pull Tension:	20 lbs

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	UL1666 Vertical Shaft, FT4
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.327 Revision Date: 05-26-2021
----------------------	--

© 2021 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.

