

**Product: [7809R](#)**


50 Ohm Wireless Transmission Coax, RF 300, 13 AWG Solid BC, Foil + 95% TC Braid, PVC Jkt, CMR

**Product Description**

50 Ohm Wireless Transmission Coax, RF 300, 13 AWG Solid Bare Copper Conductor, PE Insulation, Duobond® Foil + 95% 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**
**Conductor**

Element	No. of Elements	Size	Stranding	Nom. Diameter	Material
Coax(es)	1	13 AWG	Solid	0.072 in	BC - Bare Copper

**Insulation**

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.19 in (4.8 mm)	White

Insulation Table Notes: Gas Injected

**Outer Shield**

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
2	Braid	Tinned Copper (TC)		95%

Outer Shield Table Notes: Splicing Tape

**Outer Jacket**

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.3 in (7.6 mm)

Overall Cable Diameter (Nominal): 0.3 in (7.6 mm)

**Electrical Characteristics**
**VSWR**

Frequency	Max. VSWR
5-6000 MHz	1.25:1

**Attenuation**

Frequency	Nom. Attenuation
5 MHz	0.45 dB/100ft
10 MHz	0.6 dB/100ft
30 MHz	1 dB/100ft
50 MHz	1.3 dB/100ft
150 MHz	2.2 dB/100ft
220 MHz	2.7 dB/100ft
450 MHz	3.9 dB/100ft

900 MHz	5.6 dB/100ft
1500 MHz	7.3 dB/100ft
1800 MHz	8.1 dB/100ft
2000 MHz	8.6 dB/100ft
2500 MHz	9.7 dB/100ft
3000 MHz	10.8 dB/100ft
3500 MHz	11.8 dB/100ft
4500 MHz	13.5 dB/100ft
5800 MHz	15.8 dB/100ft
6000 MHz	16 dB/100ft

#### Power Rating

Frequency	Max. Power Rating
30 MHz	2,161 W
50 MHz	1,658 W
150 MHz	928 W
220 MHz	758 W
450 MHz	522 W
900 MHz	367 W
1,500 MHz	278 W
2,000 MHz	239 W
2,500 MHz	212 W
3,500 MHz	179 W
4,500 MHz	157 W
6,000 MHz	135 W
4,500 MHz	157 W
5,800 MHz	137 W
6,000 MHz	135 W

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
2.16 Ohm/1000ft (7.09 Ohm/km)	3.1 Ohm/1000ft (10 Ohm/km)	23 pF/ft (75 pF/m)	50 Ohm	86%

#### Voltage

UL Voltage Rating
300 V RMS

#### Mechanical Characteristics

##### Temperature

UL Temperature	Operating
60°C	-40°C To +75°C

##### Bend Radius

Stationary Min.	Installation Min.
3 in (76 mm)	3 in (76 mm)

Max. Pull Tension:	135 lbs (61.2 kg)
Bulk Cable Weight:	61 lbs/1000ft (91 kg/km)

#### Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, 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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

#### History

Update and Revision:	Revision Number: 0.610 Revision Date: 12-18-2025
----------------------	--

## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7809R 010500	Black	Reel	500 ft	612825189763	C
7809R 0101000	Black	Reel	1,000 ft	612825189756	C

Footnote:

C - CRATE REEL PUT-UP.

© 2026 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 "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 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.