


Product: [7809R](#) 

RF 300 Wireless Coax, #13, CMR/CMG



Product Description

Intermediate type, RF 300, 13 AWG solid .072" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II, tinned copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
13	Solid	BC - Bare Copper	0.072 in	1

Conductor Count:	1
------------------	---

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.19 in

Table Notes:	Gas Injected
--------------	--------------

Outer Shield

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

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.3 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
2.1 Ohm/1000ft	2.1 Ohm/1000ft		2.4 Ohm/1000ft	2.4 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
23 pF/ft

Inductance

Nominal Inductance
0.06 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss

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

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.17 ns/ft	86%

Power Rating

Frequency [MHz]	Max. Power Rating [W]	Nominal Power Rating [W]
30 MHz	2,161 W	2,161 W
50 MHz	1,658 W	1,658 W
150 MHz	928 W	928 W
220 MHz	758 W	758 W
450 MHz	522 W	522 W
900 MHz	367 W	367 W
1,500 MHz	278 W	522 W
2,000 MHz	239 W	253 W
2,500 MHz	212 W	239 W
3,500 MHz	179 W	212 W
4,500 MHz	157 W	194 W
6,000 MHz	135 W	179 W
4,500 MHz	157 W	157 W
5,800 MHz	137 W	137 W
6,000 MHz	135 W	135 W

Voltage

UL Voltage Rating
300 V RMS

VSWR

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

Temperature Range

UL Temp Rating:	60°C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	61 lbs/1000ft
Max. Pull Tension:	135 lbs
Min. Bend Radius/Minor Axis:	3 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
-----------------------	-----

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
7809R 010500	Black	Reel	500 ft	612825189763
7809R 0101000	Black	Reel	1,000 ft	612825189756

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

History

Update and Revision:	Revision Number: 0.358 Revision Date: 12-15-2021
----------------------	--

© 2022 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Coaxial Cables](#) category:

Click to view products by [Belden](#) manufacturer:

Other Similar products are found below :

[89880-003-1000](#) [CY2389-000](#) [8221-010-U1000](#) [9116-010-U500](#) [1322R-010-1000](#) [1807A-B59-U1000](#) [2020K8421-9X-CS3417](#) [9251-010-1000](#) [9275-010-U1000](#) [935240-000](#) [980704-001](#) [CF2823-000](#) [33312-010-500](#) [CZ1589-000](#) [5022W0809-0CS3263](#) [10610-4-4](#) [EF8108-000](#) [1673B TIN100](#) [672525-001](#) [144517-000](#) [735A1-008-1000](#) [8212-010-U500](#) [480414-000](#) [7915A 009U1000](#) [5024A1311-0](#) [1281S5 010250](#) [1530A 010U1000](#) [9248 010U1000](#) [9244 0101000](#) [1694A 0081000](#) [1190A 0101000](#) [8241F J5C1000](#) [1674A TIN50](#) [7915A 0091000](#) [TRCH-50-2](#) [9066 0031000](#) [7805R 008100](#) [1674A TIN100](#) [9116SB 0101000](#) [9271 0061000](#) [1613A 0101000](#) [1807A B591000](#) [5339Q5 009U500](#) [539945 0091000](#) [9116R 0101000](#) [89207 010100](#) [9058 0101000](#) [8241A 0101000](#) [DA7805R 0101000](#) [C6424](#)