imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Part Number: 7805R

RF 100 Wireless Coax, RG174, 24.5 AWG, Foil + TC Braid, CMR/CMG PVC Jacket

Product Description

RF 100 Wireless Coax, RG-174 type, 24.5 AWG solid .020" bare copper conductor, foam HDPE insulation, Beldfoil®; tinned copper braid shield (90% coverage), CMR/CMG PVC jacket.

Technical Specifications

Outer Shield Material

Туре	Layer	Material	Material Trade Name	Coverage [%]
Таре	1	Aluminum/Polyester	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		90 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.11 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
27.3 Ohm/1000ft	9.3 Ohm/1000ft	9.3 Ohm/1000ft

Capacitance

Inductance

Nominal Inductance 0.068 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
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 dB/100ft
220 MHz	9.6 dB/100ft
450 MHz	14 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 dB/100ft
4500 MHz	50 dB/100ft
5800 MHz	59 dB/100ft
6000 MHz	60.6 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.38 ns/ft	73.5 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
30 MHz	3.7 dB/100ft
50 MHz	4.7 dB/100ft
150 MHz	8.1 dB/100ft
220 MHz	9.83 dB/100ft
450 MHz	14.38 dB/100ft
900 MHz	20.97 dB/100ft
1500 MHz	27.99 dB/100ft
1800 MHz	30.78 dB/100ft
2000 MHz	32.87 dB/100ft
2500 MHz	37.38 dB/100ft
3000 MHz	42.49 dB/100ft
3500 MHz	46.9 dB/100ft
4500 MHz	53.72 dB/100ft
5800 MHz	65.1 dB/100ft
6000 MHz	66.5 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]	Nominal Power Rating [W]
30 MHz	216 W	216 W
50 MHz	154 W	154 W
150 MHz	74 W	74 W
220 MHz	57 W	57 W
450 MHz	34 W	34 W
900 MHz	21 W	21 W
1,500 MHz	14 W	14 W
2,000 MHz	12 W	13 W
2,500 MHz	10 W	12 W
3,500 MHz	8 W	10 W
4,500 MHz	7 W	9 W
6,000 MHz	5 W	8 W
4,500 MHz		7 W
5,800 MHz		5 W
6,000 MHz		5 W

Voltage

UL Voltage Rating

300 V RMS

VSWR

Frequency [MHz] 5 - 6000 MHz

Temperature Range

UL Temp Rating:	60°C	
Operating Temp Range:	-40°C To +80°C	
Maghanical Characteristics		

Mechanical Characteristics

Bulk Cable Weight:	9 lbs/1000ft
Max Recommended Pulling Tension:	20 lbs
Min Bend Radius/Minor Axis:	1.25 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
RG Type:	174/U Type
Series Type:	RF 100
RG / Series Type:	RF 100

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes	
EU Directive 2003/96/EC (BFR):	Yes	
EU Directive 2011/65/EU (ROHS II):	Yes	
EU Directive 2012/19/EU (WEEE):	Yes	
EU Directive 2015/863/EU:	Yes	
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)	
EU CE Mark:	Yes	
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01	
CA Prop 65 (CJ for Wire & Cable):	Yes	
MII Order #39 (China RoHS):	Yes	

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft	
CSA Flammability:	FT4	
UL voltage rating:	300 V RMS	

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	Footnote
7805R 008100	Gray	E
7805R 0081000	Gray	
7805R 008500	Gray	
Footnote:		

Product Overview

Environmental Space:	Indoor - Riser

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
24.5	Solid	BC - Bare Copper	0.0195 in	1
Conductor Count:			1	
Conductor Size:			24.5 AWG	

Insulation

Material	Nominal Diameter
FHDPE - Foamed High Density Polyethylene	0.06 in

© 2018 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.