



Product: [7805](#)

RF 100 Wireless Coax, RG174, #25

Product Description

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

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
25	Solid	BC - Bare Copper	0.018 in	1

Conductor Count: 1

Insulation

Material	Nominal Diameter
PE - Polyethylene	0.061 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly	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 Conductor DCR Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
32 Ohm/1000ft	32 Ohm/1000ft	9.1 Ohm/1000ft	9.1 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
31.2 pF/ft

Inductance

Nominal Inductance
0.077 μ H/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	1.5 dB/100ft
10 MHz	2.2 dB/100ft

30 MHz	3.8 dB/100ft
50 MHz	4.9 dB/100ft
150 MHz	8.6 dB/100ft
220 MHz	10.4 dB/100ft
450 MHz	15.2 dB/100ft
900 MHz	22 dB/100ft
1500 MHz	28.7 dB/100ft
1800 MHz	31.7 dB/100ft
2000 MHz	33.4 dB/100ft
2500 MHz	37.8 dB/100ft
3000 MHz	42 dB/100ft
3500 MHz	45.4 dB/100ft
4500 MHz	52.3 dB/100ft
5800 MHz	60.9 dB/100ft
6000 MHz	62 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.54 ns/ft	66 %

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	48 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

Non-UL Voltage Rating
1100 V RMS

VSWR

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

Temperature Range

Non-UL Temp Rating:	80°C
Operating Temp Range:	-40°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	9 lbs/1000ft
Max Recommended Pulling Tension:	16 lbs
Min Bend Radius/Minor Axis:	1.25 in

Standards

RG Type:	174/U Type
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Applicable Environmental and Other Programs

Environmental Space:	Indoor (Not Riser or Plenum)
EU Directive 2000/53/EC (ELV):	Yes

EU Directive 2003/11/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:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7805 010100	Black	Reel	100 ft	612825189527
7805 010500	Black	Reel	500 ft	612825189541
7805 0101000	Black	Reel	1,000 ft	612825189534

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

History

Update and Revision:	Revision Number: 0.259 Revision Date: 04-28-2020
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