



**Product:** [DA7805R](#)

DAS RF100 50 Ohm Coax, 24.5 AWG CMR

## Product Description

Distributed Antenna System RF100, 50 Ohm 24.5 AWG solid bare copper conductor, foam polyethylene insulation, Beldfoil® + tinned copper braid shield (90% coverage), CMR PVC jacket.

## Technical Specifications

### Product Overview

Suitable Applications:	DAS Applications
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### Physical Characteristics (Overall)

#### Conductor

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

#### Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.060 in

#### Outer Shield Material

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

#### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.110 in

### Electrical Characteristics

#### Conductor DCR

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

#### Capacitance

Nom. Capacitance Conductor to Shield
26.2 pF/ft

#### Impedance

Nominal Characteristic Impedance
50 Ohm

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	1.4 dB/100ft
10 MHz	2.0 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

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.38 ns/ft	74%

#### Voltage

UL Voltage Rating
300 V RMS

#### VSWR

Frequency [MHz]	Max. VSWR
5-3000 MHz	1.25:1

#### Temperature Range

UL Temp Rating:	60°C
Operating Temp Range:	-40 to +80 °C

#### Mechanical Characteristics

Bulk Cable Weight:	9 lbs/1000ft
Max. Pull Tension:	16 lbs
Min Bend Radius/Minor Axis:	1.1 in

#### Standards

NEC/(UL) Compliance:	CMR
RG Type:	174/U Type
Series Type:	RF 100

#### Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Aerial
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:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

#### Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

#### Flammability, LSOH, Toxicity Testing

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

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

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### Variants

Item #	Color	Putup Type	Length	UPC
DA7805R 0101000	Black	Reel	1,000 ft	612825285397
DA7805R 0105000	Black	Reel	5,000 ft	612825285403

### History

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Update and Revision:	Revision Number: 0.88 Revision Date: 09-30-2020
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