



**Product:** [MRG223](#)



MRG223 - Mil-Spec Coax, 50 Ohm, RG-223, 19 AWG Solid SC, Double 95% SC Braid, PVC Jkt, Commercial

## Product Description

Mil-Spec Coax, 50 Ohm, RG-223, 19 AWG Solid Silvered Copper Conductor, PE Insulation, Double 95% Silvered Copper Braid Shield, PVC Jacket, Commercial

## 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)
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### Construction Details

RG Type:	223
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#### Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
1	20 AWG	Solid	0.90 mm	SC - Silvered Copper

#### Insulation

Element	Material	Nom. Insulation Diameter
Insulated Conductor	PE - Polyethylene	2.95 mm (0.116 in)

#### Outer Shield

Outer Shield Type	Material	Coverage
Braid	Silvered Copper (SC)	95%
Braid	Silvered Copper (SC)	90%

#### Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	5.4 mm

Table Notes:	According to EN 50290-2-20
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### Electrical Characteristics

#### Return Loss (RL)

Frequency	Min. Return Loss
100-300 MHz	35 dB
300-900 MHz	30 dB

#### Attenuation

Frequency	Nom. Attenuation
50 MHz	10.5 dB/100m
230 MHz	23.6 dB/100m
470 MHz	33.8 dB/100m
860 MHz	43.9 dB/100m
1000 MHz	54.2 dB/100m

Table Notes:	Max. attenuation 10% higher
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## Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
28 Ohm/km	4.5 Ohm/km (1.4 Ohm/1000ft)	97 pF/m (30 pF/ft)	50 Ohm	66%

## Mechanical Characteristics

### Temperature

Operating	Installation	Storage
-40°C To +70°C	-5°C To +50°C	-40°C To +70°C

### Bend Radius

Stationary Min.
50 mm (2.0 in)

## Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
Military Compliance:	M-17/84
CENELEC Compliance:	EN 50117-1
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

## History

Update and Revision:	Revision Number: 0.107 Revision Date: 12-22-2023
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	EAN
MRG223.00100	Black	Reel	100 m	8719605103161
MRG223.00500	Black	Reel	500 m	8719605103178

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