

Product: 8241B ☑





Product Description

23 AWG solid .023" bare copper conductor, polyethylene insulation, bare copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor AWG Stranding Material Nominal Diameter No. of Coax 23 Solid BC - Bare Copper 0.023 in 1 Conductor Count: 1

Insulation

Material	Nominal Diameter
PE - Polyethylene	0.146 in

Outer Shield

Type	Material	Coverage [%]
Braid	Bare Copper (BC)	95%

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.242 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
20.4 Ohm/1000ft	20.4 Ohm/1000ft	2.9 Ohm/1000ft	2.9 Ohm/1000ft

Capacitance



Inductance

Nominal Inductance 0.131 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.4 dB/100ft
10 MHz	1.1 dB/100ft

50 MHz	2.4 dB/100ft
100 MHz	3.4 dB/100ft
200 MHz	4.9 dB/100ft
400 MHz	7 dB/100ft
700 MHz	9.7 dB/100ft
900 MHz	11.1 dB/100ft
1000 MHz	12 dB/100ft

Delay

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

Power Rating

Frequency [MHz]	Max. Power Rating [W]
50 MHz	470 W
100 MHz	310 W
300 MHz	160 W
500 MHz	115 W
1,000 MHz	76 W

Voltage

Non-UL Voltage Rating	UL Voltage Rating	Voltage Rating [V]
1700 V RMS	300 V RMS	30 V RMS

Electrical Characteristics Notes: 30 V RMS (UL AWM Style 1354)

Temperature Range

UL Temp Rating:	80°C
Operating Temperature Range:	-20°C To +80°C

Mechanical Characteristics

Bu	ılk Cable Weight:	34 lbs/1000ft
Ma	ax. Pull Tension:	62 lbs
Mi	in. Bend Radius/Minor Axis:	2.5 in

Standards

NEC/(UL) Compliance:	СМ
CEC/C(UL) Compliance:	CM
UL AWM Style Compliance:	AWM 1354 (30 V 80°C)
CPR Euroclass:	Eca
RG Type:	59

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 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:	No	
MII Order #39 (China RoHS):	Yes	

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
rienum (1/N).	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
8241B 0101000	Black	Reel	1,000 ft	612825355960
8241B 010U1000	Black	UnReel	1,000 ft	612825355953

Footnote: C - CRATE REEL PUT-UP.

Product Notes

Notes: RG-59/U Type standard Analog Video Coax. CM Rated Version of 8241.

History

Update and Revision: Revision Number: 0.383 Revision Date: 02-03-2025

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