



Product: [7503A](#)

MachFlex™, Vision Coax 75Ω, #20 Str BC, PO Ins, OA TC Brd, PVC Jkt, AWM 1354

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 1 Conductor 20AWG (105(7x15)x40) Bare Copper, PO Insulation, Overall Tinned Copper Braid(95%) Shield, PVC Outer Jacket, AWM 1354

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	7x15x40	BC - Bare Copper	0.04 in	1

Conductor Count: 1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.185 in

Outer Shield

Type	Material	Coverage [%]
French Braid	Tinned Copper (TC)	95%

Outer Jacket

Material	Material Trade Name	Nominal Diameter
PVC - Polyvinyl Chloride	Belflex®	0.275 in

Electrical Characteristics

Conductor DCR		
Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
8.1 Ohm/1000ft	11 Ohm/1000ft	11 Ohm/1000ft
Capacitance		
Nom. Capacitance Conductor to Shield		
17.3 pF/ft		
Inductance		
Nominal Inductance		
0.097 µH/ft		
Impedance		
Nominal Characteristic Impedance		
75 Ohm		
High Frequency (Nominal/Typical)		
Frequency [MHz]	Nom. Insertion Loss	
2.2 MHz	0.3 dB/100ft	
5 MHz	0.4 dB/100ft	

10 MHz	0.6 dB/100ft
30 MHz	1.1 dB/100ft
50 MHz	1.5 dB/100ft
100 MHz	2.2 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.3 ns/ft	80%

High Frequency

Frequency [MHz]
2.2 MHz
5 MHz
10 MHz
30 MHz
50 MHz
100 MHz

Voltage

UL Voltage Rating
30 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	34 lbs/1000ft
Max. Pull Tension:	35 lbs
Min. Bend Radius (Continuous Flexing):	5.5 in
Min. Bend Radius/Minor Axis:	2.75 in

Standards

UL AWM Style Compliance:	AWM 1354
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

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:	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

UL voltage rating:	30 V RMS
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7503A G7X500	Blue, Matte	Reel	500 ft	612825187325
7503A G7X1000	Blue, Matte	Reel	1,000 ft	612825187301

Footnote:	C - CRATE REEL PUT-UP., Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.
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History

Update and Revision:	Revision Number: 0.393 Revision Date: 04-29-2024
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