

## Customer Specification

### PART NO. M4251

## Construction

						Diameter ("in")	
1) Component 1						1 x 1 COAX	
a) Conductor						19 (1/.037) AWG SCW	0.037
b) Insulation						0.0395" Wall, Nom. PTFE	0.116
(1) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	NATURAL						
Individually Applied:							
c) Shield						SPC BRAID Shield,95% Coverage (min.)	
2) Shield						SPC BRAID Shield,93% Coverage (min.)	
3) Jacket						0.017" Wall, Nom., FEP	0.195+/- 0.005
a) Color(s)						NATURAL TAN	

## Applicable Specifications

1) Military	MIL-C-17/RG 142B/U	200°C / 1400 V <sub>RMS</sub>
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## Environmental

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1) EU Directive 2011/65/EU(RoHS2):	
	All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for <a href="#">RoHS C of C</a> .
2) REACH Regulation (EC 1907/2006):	
	This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see Alpha's <a href="#">REACH SVHC Declaration</a> .
3) California Proposition 65:	Outer surface materials used in manufacturing this part meet the requirements of California Proposition 65.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-55 to 200°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	20 lbs. max.
Electrical Properties	
	Engineering purposes only
1) Voltage Rating	1400 V <sub>RMS</sub>
2) Characteristic Impedance	50 $\omega$ +/- 2
3) Inductance	0.067 $\mu$ H/ft., Nominal
4) Ground Capacitance	29 pf/ft. @1 kHz, Nominal
5) Velocity of Propagation	70 %
6) Conductor DCR	19.3 $\omega$ /1000ft. @20°C, Nominal
7) OA Shield DCR	2.3 $\omega$ /1000ft. @20°C, Nominal
8) Voltage Withstanding	5 kV (min.)
9) Corona Extinction	1.9 kV (min.)
10) Attenuation (max. dB/100ft.)	11.7 @ 400 MHz

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 6 x 3.5 max. 3 separate pieces; Min length/piece 100 FT
b) 500 FT	12 x 4.5 x 3.5 max. 2 separate pieces; Min length/piece 100 FT
c) 100 FT	6.5 x 4 x 2.5 Continuous Length
d) Bulk ( <i>made-to-order</i> )	(Max. 3 pieces per 1000 FT/min. length 100 FT)
	<i>Spool dimensions may vary slightly.</i>

[www.alphawire.com](http://www.alphawire.com)

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M4251

M4251, RoHS-Compliant Commencing With 01/07/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with the list of restricted substances to 10 items (commonly known as RoHS 3). The reader is referred to these Directives for the specific definitions and restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

## Substance

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE),  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

## Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
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The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of issuance. This document is intended to provide guidance for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Alpha Wire is an Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 31/03/2025

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