

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 _{RMS}

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 RoHS C of C .
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 REACH SVHC Declaration .
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 _{RMS}
2) Characteristic Impedance	50 ω +/- 2
3) Inductance	0.067 μH/ft., Nominal
4) Ground Capacitance	29 pf/ft. @1 kHz, Nominal
5) Velocity of Propagation	70 %
6) Conductor DCR	19.3 ω/1000ft. @20°C, Nominal
7) OA Shield DCR	2.3 ω/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>

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M4251

M4251, RoHS-Compliant Commencing With 7/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

Substance

Substance	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.01% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE) , Including Deca-BDE	0.1% by weight (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	0.1% by weight (1000 ppm)
Butyl benzyl phthalate (BBP)	0.1% by weight (1000 ppm)
Dibutyl phthalate (DBP)	0.1% by weight (1000 ppm)
Diisobutyl phthalate (DIBP)	0.1% by weight (1000 ppm)

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 its release. The information provided is designed only as a general guide 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 not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 9/16/2025

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