

## Customer Specification

**PART NO. M4251**

### Construction

|                       |         | Diameters (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> |
|-------------|--------------------|-------------------------------|

### 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 <a href="#">Alpha's REACH SVHC Declaration</a> .                             |
| 3) California Proposition 65:       | The outer surface materials used in the manufacture of 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, Maximum              |
| Electrical Properties            |                              |
| (For Engineering purposes only)  |                              |
| 1) Voltage Rating                | 1400 V <sub>RMS</sub>        |
| 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, Minimum                |
| 9) Corona Extinction             | 1.9 kV, Minimum              |
| 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(Made-to-order) | (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/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**

- 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)
- 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 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 4/28/2024

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