

## Customer Specification

**PART NO. FIT-221L-1/4**

### Construction

1) Tubing Type	Heat Shrinkable Tubing
2) Tubing Material	LSZH Polyolefin
3) Minimum Supplied ID(In)	0.250
4) Maximum Recovered ID (In)	0.125
5) Nominal Recovered Wall Thickness(In)	0.022
6) Color(s)	BLACK

### Applicable Specifications

1) UL	Standard 224	125°C / 600 V <sub>RMS</sub>
	VW-1	

### Environmental

--

### Properties

--

<b>Physical &amp; Mechanical Properties</b>		
1) Temperature Range	-55 to 125°C	
2) Shrink Ratio	Approximately 2:1	
3) Full Recovery Temperature	110°C	
4) Minimum Shrink Temperature	100°C	
5) Tensile Strength	1500psi, Min	ASTM D638
6) Elongation	200%, Min	ASTM D638
7) Low Temperature Flex(-30°C)	no cracking	AMS-DTL-23053
8) Heat Resistance(158°C,168hrs)	100% Elongation, Min	ASTM D638
9) Heat Shock(250°C,4hrs)	no cracking	AMS-DTL-23053
10) Secant Modulus	2.5x10 <sup>4</sup> psi, Min	ASTM D882
11) Longitudinal Change	+/-5%	AMS-DTL-23053
12) Shelf Life	25 Years @ 18 to 35°C	
<b>Electrical Properties</b>		
<b>Chemical Properties</b>		
1) Water Absorption	0.70%, Max	ASTM D570
2) Copper stability(158°C,168hrs)	100% Elongation, Min	UL 224
3) Corrosion(158°C,16hrs)	no corrosion	AMS-DTL-23053
4) Halogen Free	Yes	
5) Lead Free	Yes	

## Other

<b>Packaging</b>	
1) 200 FT	CR19-0.7: 19.75 x 0.75 x 8 Max. 3 pieces/Min length 50 FT.

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



2200 US Highway 27 South  
 Richmond, IN 47374  
 Tel: 1-800-52 ALPHA  
 Web: [www.alphawire.com](http://www.alphawire.com)

# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: FIT-221L-1/4

FIT-221L-1/4, RoHS-Compliant Commencing With 1/27/2014 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials is fully compliant with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. 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 11364-2006. 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)

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 2/22/2026

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374  
Tel: 1-908-925-8000