

ALPHA WIRE

CUSTOMER PRODUCT SPECIFICATION

Part Number: FIT221L
Page 1 of 2 Pages

Issue: 1
Issue Date: 2/25/2014
Effective Date: 3/25/2014

A. Construction

- | | |
|--------------------|------------------------|
| 1) Tubing Type | Heat Shrinkable Tubing |
| 2) Tubing Material | LSZH Polyolefin |
| 3) Color(s) | BLACK |

Part Number	Minimum Supplied ID (In)	Maximum Recovered ID (In)	Nominal Recovered Wall Thickness (In)
FIT221L3/64	0.046	0.023	0.013
FIT221L1/16	0.063	0.031	0.014
FIT221L3/32	0.094	0.046	0.017
FIT221L1/8	0.125	0.062	0.017
FIT221L3/16	0.187	0.093	0.017
FIT221L1/4	0.250	0.125	0.022
FIT221L3/8	0.375	0.187	0.022
FIT221L1/2	0.500	0.250	0.022
FIT221L3/4	0.750	0.375	0.027
FIT221L1IN	1.000	0.500	0.030

B. Applicable Specifications

- | | | |
|-------|--------------|------------------------------|
| 1) UL | Standard 224 | 125°C / 600 V _{RMS} |
| | VW-1 | |

C. Environmental Compliance

- 1) RoHS Directive (2011/65/EU):
 All materials used in the manufacture of this part meet the requirements of European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. No Exemptions are required for RoHS Compliance on this item. 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:
 The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

D. Physical & Mechanical Properties

- | | | |
|----------------------------------|------------------------------|---------------|
| 1) Temperature Range | -40 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 ⁴ psi, Min | ASTM D882 |
| 11) Longitudinal Change | +/-5% | AMS-DTL-23053 |
| 12) Shelf Life | 25 Years @ 18 to 35°C | |

E. Electrical Properties

- | | | |
|-----------------------|--------------------------------|-----------|
| 1) Volume Resistivity | 1x10 ¹⁴ ohm-cm, Min | ASTM D876 |
|-----------------------|--------------------------------|-----------|

F. Chemical Properties

- | | | |
|---------------------|------------|-----------|
| 1) Water Absorption | 0.70%, Max | ASTM D570 |
|---------------------|------------|-----------|

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- | | | |
|-----------------------------------|----------------------|---------------|
| 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 | |

G. Other

- 1) Packaging
 - a) FIT221L3/64
1000 FT
 - b) FIT221L1/16
1000 FT
 - c) FIT221L3/32
500 FT
 - d) FIT221L1/8
500 FT
 - e) FIT221L3/16
200 FT
 - f) FIT221L1/4
500 FT
 - g) FIT221L3/8
200 FT
 - h) FIT221L1/2
200 FT
 - i) FIT221L3/4
200 FT
 - j) FIT221L1IN
200 FT

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