

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: FIT221MS-1
Page 1 of 2 Pages

Issue: 2
Issue Date: 2/21/2013
Effective Date: 3/8/2013

A. Construction

- | | |
|--------------------|---------------------------------|
| 1) Tubing Type | Heat Shrinkable Tubing |
| 2) Tubing Material | Cross Linked Polyolefin |
| 3) Color(s) | BLACK, RED, BLUE, GREEN, YELLOW |

Part Number	Minimum Supplied ID (In)	Maximum Recovered ID (In)	Nominal Recovered Wall Thickness (In)
FIT221-3/64	0.046	0.023	0.016
FIT221-1/16	0.063	0.031	0.017
FIT221-3/32	0.093	0.046	0.020
FIT221-1/8	0.125	0.062	0.020
FIT221-3/16	0.187	0.093	0.020

B. Applicable Specifications

- | | |
|----------------------|--|
| 1) UL | Standard 224 |
| 2) CSA International | Standard 198 |
| 3) Other | AMS-DTL-23053/5 Class 1 (Except Clear) |

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 | -55 to 135°C | |
| 2) Shrink Ratio | Approximately 2:1 | |
| 3) Full Recovery Temperature | 121°C | |
| 4) Minimum Shrink Temperature | 90°C | |
| 5) Tensile Strength | 1500psi, Min | ASTM D638 |
| 6) Elongation | 200%, Min | ASTM D638 |
| 7) Heat Shock(250°C,4hrs) | no cracking | AMS-DTL-23053 |
| 8) Secant Modulus | 2.5x10 ⁵ psi, Min | ASTM D882 |
| 9) Longitudinal Change | +/-5% | AMS-DTL-23053 |
| 10) Specific Gravity | 1.35, Max | ASTM D792 |

E. Electrical Properties

- | | | |
|------------------------|--------------------------------|-----------|
| 1) Dielectric Strength | 500 V/mil, Min | ASTM D876 |
| 2) Volume Resistivity | 1x10 ¹⁴ ohm-cm, Min | ASTM D876 |

F. Chemical Properties

- | | | |
|----------------------------------|---------------|---------------|
| 1) Water Absorption | 0.50%, Max | ASTM D570 |
| 2) Corrosion(0°C,16hrs) | no corrosion | AMS-DTL-23053 |
| 3) Fluid Resistance(23°C,24 Hrs) | 1000 PSI, Min | AMS-DTL-23053 |
| 4) Fungus Resistance | Pass | AMS-DTL-23053 |
| 5) Halogen Free | No | |
| 6) Lead Free | Yes | |

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G. Other

- 1) Packaging
 - a) FIT221-3/64
6X6 IN
 - b) FIT221-1/16
6X6 IN
 - c) FIT221-3/32
6X6 IN
 - d) FIT221-1/8
6X6 IN
 - e) FIT221-3/16
6X6 IN

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