

# Customer Specification PART NO. FIT-295-3/16

## Construction

| 1) Tubing Type                          | Heat Shrinkable Tubing             |
|---|------------------------------------|
| 2) Tubing Material                      | Semi Rigid Cross Linked Polyolefin |
| 3) Minimum Supplied ID(In)              | 0.187                              |
| 4) Maximum Recovered ID (In)            | 0.093                              |
| 5) Nominal Recovered Wall Thickness(In) | 0.025                              |
| 6) Color(s)                             | BLACK, CLEAR                       |

**Applicable Specifications** 

| 1) UL                | Standard 224 (Black only)       | 125°C / 600 V <sub>RMS</sub> |
|----------------------|---------------------------------|------------------------------|
|                      | UL VW-1                         |                              |
| 2) CSA International | CSA 22.2 No. 198 (Black)        | 125°C / 600 V <sub>RMS</sub> |
| 3) Other             | AMS-DTL-23053/6 Class 1 (Black) |                              |
|                      | AMS-DTL-23053/6 Class 2 (Clear) |                              |
|                      | Class 2: Flammable (Clear only) |                              |

## Environmental

| 1) EU Directive 2002/95/EC(RoHS):   |  |  |
|-------------------------------------|--|--|
|                                     | All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture. |  |
| 2) REACH Regulation (EC 1907/2006): |  |  |
|                                     | This product does not contain any of the 16 substances listed on the European Union's REACH Substance of Very High Concern (SVHC) candidate list in excess of 0.1% mass of the item.   |  |
| 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 135°C                   |               |  |  |
| 2) Shrink Ratio                 | Approximately 2:1              |               |  |  |
| 3) Full Recovery Temperature    | 135°C                          |               |  |  |
| 4) Minimum Shrink Temperature   | 110°C                          |               |  |  |
| 5) Tensile Strength             | 2000psi, 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 <sup>4</sup> psi, Min   | ASTM D882     |  |  |
| 9) Longitudinal Change          | +/-5%                          | AMS-DTL-23053 |  |  |
| 10) Specific Gravity(Colors)    | 1.35, Max                      | ASTM D792     |  |  |
| Specific Gravity(Clear)         | 1.00, Max                      |               |  |  |
| 11) Shelf Life                  | 5 Years @ 18 to 35°C           |               |  |  |
| Electrical Properties           |                                |               |  |  |
| 1) Dielectric Strength          | 500 V/mil, Min                 | ASTM D876     |  |  |
| 2) Volume Resistivity           | 1x10 <sup>14</sup> ohm-cm, Min | ASTM D876     |  |  |
| Chemical Properties             |                                |               |  |  |
| 1) Water Absorption(Colors)     | 0.50%, Max                     | ASTM D570     |  |  |
| Water Absorption(Clear)         | 0.02%, Max                     |               |  |  |
| 2) Corrosion(0°C,16hrs)         | no corrosion                   | AMS-DTL-23053 |  |  |
| 3) Fungus Resistance            | Pass                           | AMS-DTL-23053 |  |  |
| 4) Halogen Free                 | No                             |               |  |  |
| 5) Lead Free                    | Yes                            |               |  |  |

### Other

| Packaging |  |
|-----------|--|
| Fackaging |  |

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### RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:FIT-295-3/16

FIT-295-3/16, RoHS-Compliant Commencing With5/1/2004Production

This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.** 

| Substance  | <b>Maximum Control Value</b> |
|--|------------------------------|
| Lead   | 0.1% by weight (1000 ppm)    |
| Mercury  | 0.1% by weight (1000 ppm)    |
| Cadmium  | 0.1% by weight (100 ppm)     |
| Hexavalent Chromium  | 0.1% by weight (1000 ppm)    |
| Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE) | 0.1% by weight (1000 ppm)    |
| Including Deca-BDE   | 0.1% by weight (1000 ppm)    |

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

1/23/2011