

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

Request a Sample

# Customer Specification PART NO. ST-302-3/16

## Construction

1) Tubing Type	Adhesive Lined Heat Shrinkable Tubing
2) Tubing Material	Irradiated Polyolefin w/ Adhesive
3) Minimum Supplied ID(In)	0.187
4) Maximum Recovered ID(In)	0.093
5) Minimum Recovered Adhesive Wall Thickness(In)	0.026
6) Color(s)	BLACK

### Applicable Specifications

1) UL	Standard 224	125°C / 600 V <sub>RMS</sub>
	All Tubing Flame Test	
2) CSA International	Standard 198	
3) Other	AMS-DTL-23053/4, Class 2	

#### Environmental

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 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.		

## Properties

Physical & Mechanical Properties				
1) Temperature Range	-55 to 110°C			
2) Shrink Ratio	Approximately 2:1			
3) Minimum Shrink Temperature	110°C			
4) Tensile Strength	1500psi, Min	ASTM D638		
5) Elongation	200%, Min	ASTM D638		
6) Cold Impact(-55°C)	no cracking	ASTM D746		
7) Heat Shock(250°C,4hrs)	no cracking	AMS-DTL-23053		
8) Longitudinal Change	+1%/5%	AMS-DTL-23053		
9) Shelf Life	3 Years @ 18 to 35°C			
Electrical Properties				
1) Dielectric Strength	500 V/mil, Min	ASTM D876		
2) Volume Resistivity	1x10 <sup>12</sup> ohm-cm, Min	ASTM D876		
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			

#### Other

Packaging

#### www.alphawire.com

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## **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: ST-302-3/16

ST-302-3/16, RoHS-Compliant Commencing With 11/5/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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) 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.

Substance	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.01% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm )
Polybrominated Biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE),	
Including Deca-BDE	0.1% by weight (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	0.1% by weight (1000 ppm)
Butyl benzyl phthalate (BBP)	0.1% by weight (1000 ppm)
Dibutyl phthalate (DBP)	0.1% by weight (1000 ppm)
Diisobutyl phthalate (DIBP)	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 3/25/2020