

Customer Specification

PART NO. FIT-CLEAR-1/2

Construction

1) Tubing Type	Heat Shrinkable Tubing
2) Tubing Material	Irradiated PVDF
3) Minimum Supplied ID(In)	0.500
4) Maximum Recovered ID (In)	0.250
5) Nominal Recovered Wall Thickness(In)	0.012
6) Color(s)	CLEAR

Applicable Specifications

1) UL	Standard 224	150°C
	VW-1	
2) Other	AMS-DTL-23053/18, Class 1	
	Flammability - Passes	

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 175°C	
2) Shrink Ratio	Approximately 2:1	
3) Full Recovery Temperature	150 °C	
4) Tensile Strength	3500psi, Min	ASTM D638
5) Elongation	200%, Min	ASTM D638
6) Low Temperature Flex(-55°C)	no cracking	AMS-DTL-23053
7) Heat Resistance(250°C,168hrs)	100% Elongation, Min	ASTM D638
8) Heat Shock(275°C,4hrs)	no cracking	AMS-DTL-23053
9) Secant Modulus	1x10 ⁵ psi, Min	ASTM D882
10) Longitudinal Change	+/-10%	AMS-DTL-23053
11) Specific Gravity	2.00, Max	ASTM D792
12) Deformation(125°C,1 hr)	50% Max	UL 224
13) Shelf Life	5 Years @ 18 to 35°C	
Electrical Properties		
1) Dielectric Strength	400 V/mil, Min	ASTM D876
2) Volume Resistivity	1x10 ¹¹ ohm-cm, Min	ASTM D876
Chemical Properties		
1) Water Absorption	0.50%, Max	ASTM D570
2) Copper stability(250°C,168hrs)	70% Elongation, Min	UL 224
3) Corrosion(250°C,16hrs)	no corrosion	AMS-DTL-23053
4) Fluid Resistance(23°C,24 Hrs)	2000 PSI, Min	AMS-DTL-23053
5) Fungus Resistance	Pass	AMS-DTL-23053
6) Vacuum Outgassing - CVCN	0.10%, Max	ASTM E595
7) Vacuum Outgassing - TML	1.00%, Max	ASTM E595
8) Halogen Free	No	
9) Lead Free	Yes	

Other

Packaging

www.alphawire.com

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

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.



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



EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: FIT-CLEAR-1/2

FIT-CLEAR-1/2, RoHS-Compliant Commencing With 12/1/2004 Production

This document certifies that the Alpha part number cited above are manufactured in accordance 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. 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.** Additionally, Alpha certifies that the listed part number is in compliance China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2006.

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)

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 Company:

Dave Watson, Director of Engineering & QA

2/1/2013