

# **Customer Specification**

## **PART NO. FIT-221B-3/8**

#### Construction

1) Tubing Type	Heat Shrinkable Tubing	
2) Tubing Material	Cross Linked Polyolefin	
3) Minimum Supplied ID(In)	0.375	
4) Maximum Recovered ID (In)	0.187	
5) Nominal Recovered Wall Thickness(In)	0.025	
6) Color(s)	BLACK, BLUE, CLEAR	

### **Applicable Specifications**

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

### **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.	
	Camornia Proposition 03.	

## **Properties**

Physical & Mechanical Propertie	es	
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) Low Temperature Flex(-55°C)	no cracking	AMS-DTL-23053
8) Heat Shock(250°C,4hrs)	no cracking	AMS-DTL-23053
9) Secant Modulus	2.5x10 <sup>4</sup> psi, Min	ASTM D882
10) Longitudinal Change	+/-5%	AMS-DTL-23053
11) Specific Gravity(Colors)	1.35, Max	ASTM D792
Specific Gravity(Clear)	1.00, Max	
12) 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	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) Vacuum Outgassing - CVCM	0.10%, Max	ASTM E595
6) Halogen Free	No	
7) Lead Free	Yes	

#### **Other**

#### $\underline{www.alphawire.com}$

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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. SpecPDFFooterConfidential



Alpha Wire DDDDFIT-221B-3/8

FIT-221B-3/8000RoHS0000 2004/12/1 000000

Lead Mercury □□□□□□□□0.1% (1000 ppm) Cadmium Hexavalent Chromium □□□□□□□□0.1% (1000 ppm) Polybrominated Biphenyls (PBB) □□□□□□□□0.1% (1000 ppm) Polybrominated Diphenyl Ethers (PBDE), □□□□□□□□0.1% (1000 ppm) Including Deca-BDE Bis(2-ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) □□□□□□□□0.1% (1000 ppm) Diisobutyl phthalate (DIBP)

Alpha Wire DDDDDDDDD

□□□□□□□ Dave Watson 2025/8/28