

Customer Specification

PART NO. 74009

Construction

						Diameter ("in")	
1) Component 1						4 x 1 PAIR	
a) Conductor						22 (SOLID) AWG Bare Copper	0.026
b) Insulation						0.011" Wall, Nom. Polyolefin	0.048
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLUE - WHITE/BLUE	3	GREEN - WHITE/GREEN				
2	ORANGE - WHITE/ORANGE	4	BROWN - WHITE/BROWN				
c) Pair						2/Cond Cabled Together	
(1) Twists						Staggered Lays	
2) Cable Assembly						4 Components Cabled	
a) Twists						4.0 Twists/ft. min.	
3) Jacket						0.043" Wall, Nom., PVC	0.301 (0.316 max.)
a) Color(s)						BLACK	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N 74009 4PR 22 AWG VERIFIED (UL) CAT 5E PLTC OR CMR-CMX OUTDOOR OR C(UL) CMR --- ISO/IEC 11801 CAT 5E SUN RES OIL RES --- US PATENT 6273977 CE ROHS (2 FT, 7 DIGIT SEQUENTIAL NUMBER) FT <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i> * = Factory Code	

Applicable Specifications

Physical & Mechanical Properties																																																																																																																			
1) Temperature Range				-25 to 75°C																																																																																																															
2) Bend Radius				4X Cable Diameter																																																																																																															
3) Pull Tension				40 lbs. max.																																																																																																															
4) Sunlight Resistance				Yes																																																																																																															
5) Cable Weight				30 lbs./1000ft.																																																																																																															
Electrical Properties				Engineering purposes only																																																																																																															
1) Voltage Rating				300 V _{RMS}																																																																																																															
2) Characteristic Impedance				100 ω +/- 15																																																																																																															
3) Mutual Capacitance				15 pF/ft. @1 kHz, Nominal																																																																																																															
4) Velocity of Propagation				70%																																																																																																															
5) Propagation Delay				510 nS/100m																																																																																																															
6) Delay Skew				25 nS/100m (max.)																																																																																																															
7) Conductor DCR				9 ω/100m @20°C (max.)																																																																																																															
8) DCR Unbalance				3% @20°C (max.)																																																																																																															
<table><tr><th>Frequency(MHz)</th><th>Max. Attenuation(dB/100m)</th><th>Min. NEXT(dB)</th><th>Min. PSNEXT(dB)</th><th>Min. ACR(dB)</th></tr><tr><td>1</td><td>2</td><td>65.3</td><td>65.3</td><td>63.3</td></tr><tr><td>4</td><td>4</td><td>56.3</td><td>56.3</td><td>52.3</td></tr><tr><td>8</td><td>5.7</td><td>51.8</td><td>51.8</td><td>46.1</td></tr><tr><td>10</td><td>6.4</td><td>50.3</td><td>50.3</td><td>43.9</td></tr><tr><td>16</td><td>8.1</td><td>47.3</td><td>47.3</td><td>39.1</td></tr><tr><td>20</td><td>9.2</td><td>45.8</td><td>45.8</td><td>35.2</td></tr><tr><td>25</td><td>10.3</td><td>44.3</td><td>44.3</td><td>34.1</td></tr><tr><td>31.25</td><td>11.6</td><td>42.9</td><td>42.9</td><td>31.3</td></tr><tr><td>62.5</td><td>16.8</td><td>38.4</td><td>38.4</td><td>21.6</td></tr><tr><td>100</td><td>21.7</td><td>35.3</td><td>35.3</td><td>17.1</td></tr><tr><th>Frequency (MHz)</th><th>Min. PSACR(dB)</th><th>Min. RL(dB)</th><th>Min. ELFEXT(dB)</th><th>Min. PSELFEXT(dB)</th></tr><tr><td>1</td><td>63.3</td><td>20</td><td>63.8</td><td>60.8</td></tr><tr><td>4</td><td>52.3</td><td>23</td><td>51.7</td><td>48.7</td></tr><tr><td>8</td><td>46.1</td><td>24.5</td><td>45.7</td><td>42.7</td></tr><tr><td>10</td><td>43.9</td><td>25</td><td>43.8</td><td>40.8</td></tr><tr><td>16</td><td>39.1</td><td>25</td><td>39.7</td><td>36.7</td></tr><tr><td>20</td><td>35.2</td><td>25</td><td>37.7</td><td>34.7</td></tr><tr><td>25</td><td>34.1</td><td>24.3</td><td>35.8</td><td>32.8</td></tr><tr><td>31.25</td><td>31.3</td><td>23.6</td><td>33.9</td><td>30.9</td></tr><tr><td>62.5</td><td>21.6</td><td>21.5</td><td>27.8</td><td>24.8</td></tr><tr><td>100</td><td>17.1</td><td>20.1</td><td>23.8</td><td>20.8</td></tr></table>						Frequency(MHz)	Max. Attenuation(dB/100m)	Min. NEXT(dB)	Min. PSNEXT(dB)	Min. ACR(dB)	1	2	65.3	65.3	63.3	4	4	56.3	56.3	52.3	8	5.7	51.8	51.8	46.1	10	6.4	50.3	50.3	43.9	16	8.1	47.3	47.3	39.1	20	9.2	45.8	45.8	35.2	25	10.3	44.3	44.3	34.1	31.25	11.6	42.9	42.9	31.3	62.5	16.8	38.4	38.4	21.6	100	21.7	35.3	35.3	17.1	Frequency (MHz)	Min. PSACR(dB)	Min. RL(dB)	Min. ELFEXT(dB)	Min. PSELFEXT(dB)	1	63.3	20	63.8	60.8	4	52.3	23	51.7	48.7	8	46.1	24.5	45.7	42.7	10	43.9	25	43.8	40.8	16	39.1	25	39.7	36.7	20	35.2	25	37.7	34.7	25	34.1	24.3	35.8	32.8	31.25	31.3	23.6	33.9	30.9	62.5	21.6	21.5	27.8	24.8	100	17.1	20.1	23.8	20.8
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Other

Packaging	Flange x Traverse x Barrel (inches)
a) 500 FT	12 x 10 x 5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 74009

74009, RoHS-Compliant Commencing With 9/30/2013 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, 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). This product also complies with UK - RoHS. 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. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

Substance

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

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 12/23/2025

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