

**ALPHA WIRE COMPANY**  
**CUSTOMER PRODUCT SPECIFICATION**

Part Number: 9109  
Page 1 of 2 Pages

Issue: 4  
Issue Date: 2/24/2006  
Effective Date: 3/31/2006

**A. Construction**

Diameters

- |    |               |                         |       |
|----|---------------|-------------------------|-------|
| 1) | Component 1   | 1 X 1 COND              |       |
|    | a) Conductor  | 20 (7/28) AWG TC        |       |
|    | b) Insulation | 0.017" Wall, Nom. (FEP) | 0.072 |
|    | (1) Color(s)  |                         |       |

Cond	Color	Cond	Color	Cond	Color
1	CLEAR				

- |    |               |                         |       |
|----|---------------|-------------------------|-------|
| 2) | Component 2   | 1 X 1 COND              |       |
|    | a) Conductor  | 20 (7/28) AWG BC        |       |
|    | b) Insulation | 0.017" Wall, Nom. (FEP) | 0.072 |
|    | (1) Color(s)  |                         |       |

Cond	Color	Cond	Color	Cond	Color
1	CLEAR				

- |    |             |   |                |
|----|-------------|---|----------------|
| 3) | Shield      | TC BRAID Shield,95% Coverage, Min.  |                |
|    | 4) Jacket   | 0.015" Wall, Nom., Kynar(PVDF)  | 0.252+/- 0.007 |
|    | a) Color(s) | SLATE   |                |
|    | b) Print    | ALPHA WIRE-* P/N 9109 100 OHM TWINAX<br>(UL) 125C TYPE CL2P OR CMP OR C(UL)CMP ROHS<br>* = Factory Code |                |

**B. Industry Approvals**

- |    |                                |      |       |
|----|--------------------------------|------|-------|
| 1) | UL                             | CL2P | 125°C |
|    |                                | CMP  | 125°C |
| 2) | CSA International              | CMP  | 125°C |
| 3) | 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.

- |    |                            |  |
|----|----------------------------|--|
| 4) | California Proposition 65: | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65. |
|----|----------------------------|--|

**C. Physical & Mechanical Properties**

- |    |                   |                    |
|----|-------------------|--------------------|
| 1) | Temperature Range | -55 to 125°C       |
| 2) | Bend Radius       | 10X Cable Diameter |

**D. Electrical Properties**

- |    |                          |  |
|----|--------------------------|--|
| 1) | Voltage Rating           | 30 V <sub>RMS</sub>  |
| 2) | Max. DCR, Ohms/1000'     | 10.5 (Tinned copper)<br>9.8 (Bare copper)<br>@20C                              |
| 3) | Max Shield resistance    | 2.25 Ohms/1000'  |
| 4) | Capacitance              | 13.3 pF/Ft @ 1 KHz   |
| 5) | Velocity of Propagation  | 69%  |
| 6) | Impedance                | 100 +/- 5 Ohms @ 1 MHz   |
| 7) | Max Attenuation, dB/100' | 1.2 @ 10 MHz<br>1.7 @ 20 MHz<br>2.7 @ 50 MHz                                   |
| 8) | Nom Attenuation, dB/100' | 0.4 @ 1 MHz<br>1.2 @ 10 MHz<br>2.7 @ 50 MHz<br>4.2 @ 100 MHz<br>10.5 @ 400 MHz |

---

**ALPHA WIRE COMPANY**  
**CUSTOMER PRODUCT SPECIFICATION**

---

**Part Number: 9109**  
**Page 2 of 2 Pages**

**Issue: 4**  
**Issue Date: 2/24/2006**  
**Effective Date: 3/31/2006**

---

**E. Other**

- 1) Packaging
  - a) 1000 FT