

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

# Customer Specification PART NO. 9854C

Construction

				Diameters (In)		
1) Component 1		3 X 1 PAIR	3 X 1 PAIR			
a) Conductor		28 (7/36) AWG TC	28 (7/36) AWG TC		0.015	
b) Insulation		0.0085" Wall, Nom. P	0.0085" Wall, Nom. Polypropylene(PP)		0.033	
(1) Color(s)						
Pair	Color	Pair	Color	Pair	Color	
1	WHITE-GRAY	2	YELLOW-ORANGE	3	GREEN-BLUE	
c) Pair		2/Cond Cabled Toget	2/Cond Cabled Together			
(1) Twists:		12.0 Twists/foot (min)	12.0 Twists/foot (min)			
Individually Applied:						
d) Shield:		Alum/Mylar Tape, 259	% Overlap, Min.			
(1) Foil Direction		Foil Facing Out				
2) Component 2		1 X 1 PAIR				
a) Conductor		24 (7/32) AWG TC	24 (7/32) AWG TC		0.024	
b) Insulation		0.010" Wall, Nom. P	0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color(s)						
Pair	Color	Pair	Color	Pair	Color	
1	BLACK-RED					
c) Pair		2/Cond Cabled Toge	2/Cond Cabled Together			
(1) Twists:		9.6 Twists/foot (min)	9.6 Twists/foot (min)			
Individually Applied:						
d) Shield:		Alum/Mylar Tape, 25	Alum/Mylar Tape, 25% Overlap, Min.			
(1) Foil Direction		Foil Facing Out	Foil Facing Out			
(2) Drain Wire		24 (7/32) AWG TC	24 (7/32) AWG TC			
3) Cable Assembly		4 Components Cable	4 Components Cabled			
a) Twists:		4.0 Twists/foot (min)	4.0 Twists/foot (min)			
b) Core Wrap		Clear Mylar Tape, 25	Clear Mylar Tape, 25% Overlap, Min.			
4) Shield:		A/P/A Tape, 25% Ov	A/P/A Tape, 25% Overlap, Min.			
a) Braid		TC,90% Coverage, N	TC,90% Coverage, Min.			
5) Jacket		0.032" Wall, Nom.,P	0.032" Wall, Nom.,PVC		0.250 (0.265 Max.)	
a) Color(s)		SLATE	SLATE			
b) Print		IEEE 802.3 TRANSC SHIELDED 75C (UL) COMPUTER CABLE * = Factory Code	ALPHA WIRE-* P/N 9854C IEEE 802.3 TRANSCEIVER CABLE 3PR28 1PR24 SHIELDED 75C (UL) CM OR AWM 2919 LOW VOLTAGE COMPUTER CABLE OR C(UL) CMG FT4 ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

## Applicable Specifications

1) UL	СМ	75°C
	AWM/STYLE 2919	80°C / 30 V <sub>RMS</sub>
2) CSA International	C(UL) TYPE CMG	75°C
	FT4	

## 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.	
I 2) 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	-20 to 80°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	18.8 Lbs, Maximum		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>	300 V <sub>RMS</sub>	
2) Component 1			
a) Characteristic Impedance	78 O +/- 5		
b) Mutual Capacitance	19.7 pf/ft @1 kHz, Nominal		
c) Velocity of Propagation	66 %		
d) Conductor DCR	65 O/1000ft @20°C, Nominal		
e) Attenuation, Max dB/100ft	1.4 @ 1 MHz		
	3.5 @ 5 MHz		
	4.8 @ 10 MHz		
3) Component 2			
a) Conductor DCR	25 O/1000ft @20°C, Nominal		
b) OA Shield DCR	3.2 O/1000ft @20\°C, Nominal		

#### Other

1) Packaging	
a) 1000 FT	

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#### **RoHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number:9854C

9854C, RoHS-Compliant Commencing With11/1/2004Production

This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, 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.** 

Substance	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE)	0.1% by weight (1000 ppm)
Including Deca-BDE	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

1/21/2011