## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





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

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Request a Sample

# Customer Specification PART NO. 79108

#### Construction

|                     |        |  |   | Diameters (In) |             |
|---------------------|--------|--|---|----------------|-------------|
| 1) Component 1      |        | 18 X 1 COND                                  | 18 X 1 COND   |                |             |
| a) Conductor        |        | 20 (10/30) AWO                               | 20 (10/30) AWG Tinned Copper  |                |             |
| b) Insulation       |        | 0.0095" Wall, N<br>Ether                     | 0.0095" Wall, Nom. Modified Polyphenylene<br>Ether  |                |             |
| (1) Color Code      |        | Alpha Wire Col                               | Alpha Wire Color Code D   |                |             |
| Cond                | Color  | Cond   | Color   | Cond           | Color       |
| 1                   | BLACK  | 7  | BROWN   | 13             | RED/GREEN   |
| 2                   | RED    | 8  | YELLOW  | 14             | RED/YELLOW  |
| 3                   | WHITE  | 9  | VIOLET  | 15             | RED/BLACK   |
| 4                   | GREEN  | 10   | SLATE   | 16             | WHITE/BLACK |
| 5                   | ORANGE | 11   | PINK  | 17             | WHITE/RED   |
| 6                   | BLUE   | 12   | TAN   | 18             | WHITE/GREEN |
| 2) Cable Assembly   |        | 18 Components                                | 18 Components Cabled  |                |             |
| a) Twists:          |        | 3.7 Twists/foot                              | 3.7 Twists/foot (min)   |                |             |
| b) Orientation:     |        |  | Components to be arranged from INSIDE<br>LAYER to OUTSIDE LAYER   |                |             |
| c) Core Wrap        |        | Nonwoven Poly                                | Nonwoven Polyester Tape, 25% Overlap, Min.  |                |             |
| 3) Shield           |        | Tinned Copper<br>Min.                        | Tinned Copper BRAID Shield,85% Coverage,<br>Min.  |                |             |
| 4) Jacket           |        | 0.035" Wall, No                              | 0.035" Wall, Nom.,MPPE  |                |             |
| a) Color(s)         |        | SLATE  | SLATE   |                |             |
| b) Jacket Separator |        | Nonwoven Poly                                | Nonwoven Polyester Tape, 25% Overlap, Min.  |                |             |
| c) Print            |        | ECOFLEX(TM)<br>80C 300V VW-1<br>600V 105C CE | ALPHA WIRE-* P/N 79108 18C 20 AWG<br>ECOFLEX(TM) RU AWM 21819 105C 600V OR 21492<br>80C 300V VW-1 CLASS K C(RU) AWM I/II A/B FT1<br>600V 105C CE ROHS (SEQ FOOTAGE)<br>* = Factory Code |                |             |

**Applicable Specifications** 

| 1) UL                | AWM/STYLE 21819                     | 105°C / 600 V <sub>RMS</sub>   |
|----------------------|-------------------------------------|--------------------------------|
|                      | AWM/STYLE 21492                     | 80°C / 300 V <sub>RMS</sub>    |
|                      | VW-1                                |                                |
| 2) CSA International | C(RU) AWM I/II A/B FT1              | 105C°C / 600V V <sub>RMS</sub> |
| 3) Other             | Halogen-Free                        |                                |
| 4) CE:               | EU Low Voltage Directive 2014/35/EC |                                |

#### Environmental

| 1) CE: EU Directive 2011/65/EU(RoHS2): |   |  |  |  |
|--|---|--|--|--|
|  | This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item. 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:          | Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.   |  |  |  |

#### Properties

| Physical & Mechanical Properties |   |  |  |  |
|----------------------------------|---|--|--|--|
| 1) Temperature Range             | -40 to 105°C(static), -5 to 105°C (dynamic)           |  |  |  |
| 2) Bend Radius                   | 6X Cable Diameter(static), 8X Cable Diameter(dynamic) |  |  |  |
| 3) Pull Tension                  | 148 Lbs, Maximum                                      |  |  |  |
| Electrical Properties            | (For Engineering purposes only)                       |  |  |  |
| 1) Voltage Rating                | 600 V <sub>RMS</sub>                                  |  |  |  |
| 2) Capacitance                   | 29 pF/ft @1 kHz, Nominal Conductor to Conductor       |  |  |  |
| 3) Ground Capacitance            | 52 pF/ft @1 kHz, Nominal                              |  |  |  |
| 4) Inductance                    | 0.17 µH/ft, Nominal                                   |  |  |  |
| 5) Conductor DCR                 | 11.7 Ω/1000ft @20°C, Nominal                          |  |  |  |
| 6) OA Shield DCR                 | 4 Ω/1000ft @20°C, Nominal                             |  |  |  |

#### Other

| Packaging  | Flange x Traverse x Barrel (inches)  |
|------------|--------------------------------------|
| a) 1000 FT | 20 x 11 x 8 Continuous length        |
| b) 100 FT  | 12 x 10 x 5 Continuous length        |
|            | [Spool dimensions may vary slightly] |

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Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742) Although Alpha Wire ("Alpha") makes every reasonable effort to ensure their 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.

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#### **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 79108

79108, RoHS-Compliant Commencing With 7/27/2012 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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) 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.

| 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)  |
| Bis(2-ethylhexyl) phthalate (DEHP)     | 0.1% by weight (1000 ppm)  |
| Butyl benzyl phthalate (BBP)           | 0.1% by weight (1000 ppm)  |
| Dibutyl phthalate (DBP)                | 0.1% by weight (1000 ppm)  |
| Diisobutyl phthalate (DIBP)            | 0.1% by weight (1000 ppm)  |

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 5/3/2017