# 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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

Request a Sample

# Customer Specification PART NO. 80128

#### Construction

				Diameters (In)		
1) Component 1		20 X 1 COND	20 X 1 COND			
a) Conductor		20 (26/34) AWG	20 (26/34) AWG Tinned Copper		0.035	
b) Insulation		0.010" Wall, Nom. MPPE		0.055		
(1) Print		ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED				
(2) Color Code		Alpha Wire Colo	Alpha Wire Color Code KX			
Cond	Color	Cond	Color	Cond	Color	
1	GREEN/YELLOW	8	BLACK#7	15	BLACK#14	
2	BLACK#1	9	BLACK#8	16	BLACK#15	
3	BLACK#2	10	BLACK#9	17	BLACK#16	
4	BLACK#3	11	BLACK#10	18	BLACK#17	
5	BLACK#4	12	BLACK#11	19	BLACK#18	
6	BLACK#5	13	BLACK#12	20	BLACK#19	
7	BLACK#6	14	BLACK#13			
2) Cable Assembly		20 Components Cabled				
a) Twists:		3.4 Twists/foot (min)				
b) Orientation:		Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield		Tinned Copper BRAID Shield,85% Coverage, Min.				
4) Jacket		0.032" Wall, Nom.,Polyurethane, Zero Halogen (ZH)		0.389+/- 0.019		
a) Color(s)		SLATE				
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.				
c) Print		ALPHA WIRE-* P/N 80128 20C 20 AWG RU AWM STYLE 21959 90C 600V SUN RES 60C OIL OR CRU AWM I/II A/B 90C 600V FT2 IEC EN 60332-1/2 CE ROHS (SEQ FOOTAGE) * = Factory Code				

**Applicable Specifications** 

1) UL		
a) Component 1	AWM/STYLE 11231	105°C / 600 V <sub>RMS</sub>
b) Overall	AWM/STYLE 21959	90°C / 600 V <sub>RMS</sub>
	60C OIL	
	SUN RES	
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V <sub>RMS</sub>
	FT2	
3) IEC		
a) Component 1	EN 60228 Conductors, Class 6	
b) Overall	EN 60754-1 Acid Gas Generation	
	EN 60754-2 Acid Gas Generation	
	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
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.		

## Properties

Physical & Mechanical Properties		
1) Temperature Range	-50 to 90°C(static), -40 to 80°C (dynamic)	
2) Bend Radius	4X Cable Diameter(static), 6X Cable Diameter(dynamic)	
3) Pull Tension	171 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	<sup>600 V</sup> RMS	
2) Capacitance	28 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	50 pF/ft @1 kHz, Nominal	
4) Inductance	0.17 μH/ft, Nominal	
5) Conductor DCR	11.2 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	2.32 Ω/1000ft @20°C, Nominal	

### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 100 FT	12 x 10 x 5 Continuous length	
b) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 80128

80128, RoHS-Compliant Commencing With 5/18/2015 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