

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: 669333
Page 1 of 2 Pages

Issue: 5
Issue Date: 7/7/2014
Effective Date: 7/9/2014

A. Construction

Diameters (In)

- | | | |
|----------------|-------------------------------------|-------|
| 1) Component 1 | 1 X 2 PAIR | |
| a) Conductor | 24 (7/32) AWG BC | 0.024 |
| b) Insulation | 0.011" Wall, Nom. Polypropylene(PP) | 0.045 |
| (1) Color(s) | | |

Pair	Color	Pair	Color	Pair	Color
1	BLU - WHT/BLU	2	ORG - WHT/ORG		

- | | | |
|-------------------|---|--------------------|
| c) Pair | 2/Cond Cabled Together | |
| (1) Lay Length: | BLU – WHT/BLU: 0.415" LH Lay | |
| | ORG – WHT/ORG: 0.549" LH Lay | |
| d) Cabling | 2 PAIR Cabled | |
| (1) Twists: | 4.0 Twists/foot (min) | |
| e) Jacket | 0.020" Wall, Nom.,PVC | 0.200 (0.210 Max.) |
| (1) Color(s) | BLACK | |
| 2) Shield: | Alum/Mylar Tape, 25% Overlap, Min. | |
| a) Foil Direction | Foil Facing Out | |
| b) Braid | TC,90% Coverage, Min. | |
| 3) Jacket | 0.033" Wall, Nom.,TPE | 0.310 (0.320 Max.) |
| a) Color(s) | BLACK | |
| b) Print | ALPHA WIRE-* P/N 669333 2PR 24 AWG
RU AWM 20626 80C 300V CAT5E PATCH
ROHS (SEQUENTIAL #) FT
* = Factory Code | |

B. Applicable Specifications

- | | | |
|----------------|-------------------------|-----------------------------|
| 1) UL | | |
| a) Component 1 | AWM/STYLE 10152 | 80°C / 300 V _{RMS} |
| b) Overall | AWM/STYLE 20626 | 80°C / 300 V _{RMS} |
| 2) TIA | TIA-568-C.2 Category 5e | |

C. Environmental Compliance

- | | |
|-------------------------------------|--|
| 1) CE: | EU Directive 2011/65/EU(RoHS2):
All materials used in the manufacture and packaging of this part must meet the requirements of European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. |
| 2) REACH Regulation (EC 1907/2006): | This product may not contain any of the substances listed in the latest issue European Union's REACH Substance of Very High Concern (SVHC) candidate list in excess of 0.1% mass of the item. |

D. Physical & Mechanical Properties

- | | |
|----------------------|-------------------|
| 1) Temperature Range | -50 to 105°C |
| 2) Bend Radius | 8X Cable Diameter |
| 3) Pull Tension | 20.7 Lbs, Maximum |

E. Electrical Properties

- | | |
|-----------------------------|---------------------------------|
| | (For Engineering purposes only) |
| 1) Voltage Rating | 300 V _{RMS} |
| 2) Characteristic Impedance | 100 Ω +/- 15 |
| 3) Mutual Capacitance | 5.6 nF/100m Max |
| 4) Velocity of Propagation | 70 % Nom. |
| 5) Conductor DCR | 9.38 Ω/100m Max |
| 6) Skew | 45 ns/100m Max |
| 7) Pair to Ground Unbalance | 330 pF/100m Max |
| 8) Transfer Impedance | 100 mΩ/m Max |
| 9) DC Unbalance of a Pair | 5% Max |
| 10) Insertion Loss | 2.4 (Max dB/100m) @ 1 MHz |

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4.9 (Max dB/100m) @ 4 MHz
6.9 (Max dB/100m) @ 8 MHz
7.8 (Max dB/100m) @ 10 MHz
9.9 (Max dB/100m) @ 16 MHz
11.1 (Max dB/100m) @ 20 MHz
12.5 (Max dB/100m) @ 25 MHz
14.1 (Max dB/100m) @ 31.25 MHz
20.4 (Max dB/100m) @ 62.5 MHz
26.4 (Max dB/100m) @ 100 MHz

F. Other

- | | |
|--------------|--|
| 1) Packaging | Flange x Traverse x Barrel (inches) |
| a) 1000 FT | 16 x 11 x 8 Continuous length |
| b) Bulk Ft. | 16 x 11 x 8 Continuous length, 400 ft. Min, 1200 ft. Max |

This Design is custom, Made-To-Order & once accepted, the order is NON-CANCELLABLE & NON-RETURNABLE.

Accepted By:	Date:
Company:	Title:

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