



**Product:** [50106UAL](#)

Paired - Category 6 U/UTP Unbonded – Halogen Free Cable

### Product Description

23 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, LSZH inner jacket with rip cord, Armored, LSZH outer jacket with Ripcord.

### Technical Specifications

#### Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6
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#### Construction Details

##### Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
23 AWG	Solid	BC - Bare Copper	4	8

##### Insulation

Material	Color Code
PO - Polyolefin	Blue & White with Blue Markings, Orange & White with Orange Markings, Green & White with Green Markings, Brown & White with Brown Markings

##### Cable Core

Description
Overall Cabling Fillers

##### Inner Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.2 mm (0.24 in)	Yes

##### Armor

Armor Type & Material	Coverage
CAT - Corrugated Aluminum Tape	100%

##### Outer Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	9.5 mm (0.37 in)	Yes

#### Electrical Characteristics

##### Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm

##### Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
538 ns/100m	45 ns/100m	70%

##### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
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1	2 dB/100m	74.3	72.3	67.8	64.8	20
4	3.8 dB/100m	65.3	63.3	55.8	52.8	23
8	5.3 dB/100m	60.8	58.8	49.7	46.7	24.5
10	6 dB/100m	59.3	57.3	47.8	44.8	25
16	7.6 dB/100m	56.2	54.2	43.7	40.7	25
20	8.5 dB/100m	54.8	52.8	41.8	38.8	25
25	9.5 dB/100m	53.3	51.3	39.8	36.8	24.3
31.25	10.7 dB/100m	51.9	49.9	37.9	34.9	23.6
62.5	15.4 dB/100m	47.4	45.4	31.9	28.9	21.5
100	19.8 dB/100m	44.3	42.3	27.8	24.8	20.1
155	25.2 dB/100m	41.4	39.4	24	21	18.8
200	29 dB/100m	39.8	37.8	21.8	18.8	18
250	32.8 dB/100m	38.3	36.3	19.8	16.8	17.3

#### Voltage

<b>UL Voltage Rating</b>
72 V DC

## Mechanical Characteristics

#### Temperature

<b>Operating</b>
-20°C To +75°C

#### Bend Radius

<b>Installation Min.</b>
72 mm (2.8 in)

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	80 kg/km (54 lbs/1000ft)

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-3-24
Data Category:	Category 6
TIA/EIA Compliance:	TIA-568.2-D
ISO/IEC Compliance:	IEC 61156-5, ISO/IEC 11801, IEC 61034-2 - Smoke Density Min Transmittance = 60%
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = 5 mg/g, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3

## Product Notes

Notes:	Jacket sequentially marked
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## History

Update and Revision:	Revision Number: 0.29 Revision Date: 08-13-2024
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## Part Numbers

#### Variants

Item #	Color	Length
50106UAL 010305M	Black	305 m
50106UAL 006305M	Blue	305 m
50106UAL 008305M	Gray	305 m
50106UAL 009305M	White	305 m

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