



# Product: <u>50106U</u> ☑

Paired - Category 6 U/UTP Unbonded - Pair Cable

# **Product Description**

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, rip cord, see color code chart (below), PVC jacket.

# **Technical Specifications**

## **Product Overview**

Suitable A	pplications:		lorizontal Cable 50MHz Catego		, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video,				
Constru	Construction Details								
Conductor									
Size	Stranding	Material	No. of Pairs	No. of Elements					
24 AWG	Solid	BC - Bare Copper	4	8					
Insulation									
Materia	al				Color Code				
PO - Polye	D - Polyolefin Blue & White with Blue Markings, Orange & White with Orange Markings, Green & White with Green Markings, Brown & White with Brown Markings								
Cable Core	9								

Description
Overall Cabling Fillers

#### Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	6.3 mm (0.25 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]
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

UL Voltage Rating 72 V DC

## **Mechanical Characteristics**

Temperature	
Operating	
-20°C To +75°C	
Bend Radius	
Installation Min.	
50.4 mm (1.98 in)	
Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	47 kg/km (32 lbs/1000ft)
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# **Standards and Compliance**

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance		
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-3-25		
NEC / UL Compliance:	СМ		
CEC / C(UL) Compliance:	CM		
Data Category:	Category 6		
TIA/EIA Compliance:	TIA-568.2-D Category 6		
ISO/IEC Compliance:	ISO/IEC 11801 Cat 6		
Product Notes			
Notes:	Jacket sequentially marked		

History				
Update and Revision:	Revision Number: 0.32 Revision Date: 04-16-2025			
Part Numbers				

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#### Variants

ltem #	Color	Putup Type	Length	EAN
50106U-A305	Black	Reel	305 m	8719605204639
50106U 010305M	Black		305 m	
50106U 006305M	Blue		305 m	
50106U 008305M	Gray		305 m	

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