



Product: [50106F](#)

Paired - Category 6 F/UTP Unbonded – Pair Cable

Product Description

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

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

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	7.5 mm (0.30 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.

60 mm (2.4 in)

Max. Pull Tension: 110 N (25 lbf)

Bulk Cable Weight: 62 kg/km (42 lbs/1000ft)

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:	CM
CEC / C(UL) Compliance:	CM
Data Category:	Category 6
TIA/EIA Compliance:	TIA-568.2-D
ISO/IEC Compliance:	ISO/IEC 11801 Cat 6

Product Notes

Notes: Jacket sequentially marked

History

Update and Revision: Revision Number: 0.32 Revision Date: 08-13-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
50106F-A305	Black	Reel	305 m	8719605204622
50106F 010305M	Black		305 m	
50106F 006305M	Blue		305 m	
50106F 008305M	Gray		305 m	
50106F 005305M	Green		305 m	
50106F 002305M	Red		305 m	

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