

CAT6A CMP F/UTP PLENUM-RATED **SHIELDED**

SKU: 165-500 SERIES

Part Number	Description
165-500/A/PS/BK	CAT6A, Solid F/UTP, 23 AWG, Plenum, Black
165-501/A/PS/BL	CAT6A, Solid F/UTP, 23 AWG, Plenum, Blue
165-502/A/PS/GR	CAT6A, Solid F/UTP, 23 AWG, Plenum, Green
165-508/A/PS/WH	CAT6A, Solid F/UTP, 23 AWG, Plenum, White
165-509/A/PS/YL	CAT6A, Solid F/UTP, 23 AWG, Plenum, Yellow

Technical Data

Product Standard Certification

CMP

Conductor

Size

Solid Bare Copper

23 AWG 0.023 in. (0.585 ±0.006 mm)

Insulation

Outer Diameter

SAMP® FEP

0.043 in. (1.10 ±0.05 mm)

Construction

Tape

PE Tape (20/0.025 mm)

Drain Wire

24 AWG Solid Tin Copper

Shield (100% coverage with 25% overlapping)

Aluminum/Poly Tape

Divider (Pair Separator)

Yes, SAMP® LSZH CROSSWEB

Ripcord

Yes, Kevlar®

Jacket

Outer Diameter

Plenum PVC

0.291 in. ±0.012 (7.4 ±0.3 mm)

Nom. Thickness

0.0197 in. (0.50 mm)

Color of Pairs

Pair 1

Brown, White-Brown

Pair 2

Blue, White-Blue

Pair 3

Orange, White-Orange

Pair 4

Green, White-Green

Electrical Characteristics

Rated Temperature (°C)

75°C

Voltage Rating

300 V

Capacitance

5.6nF/100m Nominal

Velocity of Propagation (VPN)

≥67 %

Max. Conductor D.C.R.

9.38Ω/100m Nominal

Max. D.C.R. Unbalance

≤5%

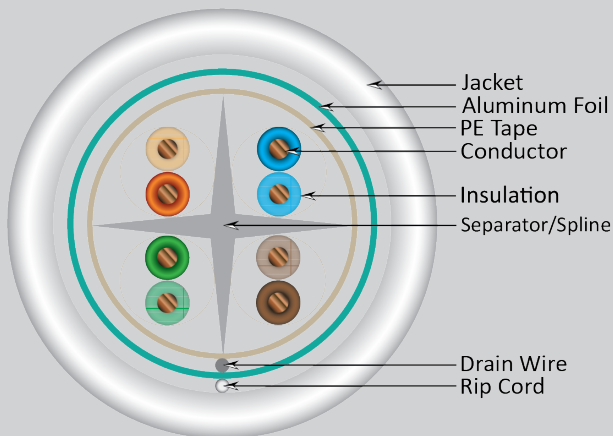


DESCRIPTION

CAT6A, 23 AWG, F/UTP (SHIELDED)
Solid Bare Copper, Plenum-Rated,
1000 ft Spool

FEATURES

- 23 AWG Bare Copper Conductors
- Shielded Twisted-Pair (F/UTP) Construction
- Plenum Fire Safety Rating (CMP)
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568C.2 and ISO/IEC 11801 Transmission Performance Specifications
- Supports PoE++ type 4
- Supports High-Speed Data Applications including Ethernet 10 Gigabit, 100 BASE TX, 100BaseVG AnyLan, 155ATM, 622ATM, NTSC/PAL, Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422
- ETL-Listed, RoHS-Compliant
- Packaging: 1000 ft Wooden Spool - 15 in. x 11.5 in.
- Weight: 48.4 lb



VERTICAL CABLE

951.696.7772 California

800.749.2447 Florida

845.391.8318 New York

713.322.7242 Houston



www.verticalcable.com

Rev. 08/2025

Specs subject to change without notice.

It is the sole responsibility of the user to have the most current specs.

CAT6A CMP F/UTP PLENUM-RATED SHIELDED

Characteristic Impedance

1 MHz - 100 MHz	100 ± 15%
101 MHz - 250 MHz	100 ± 22%
250 MHz - 500 MHz	100 ± 25%

Ratings

NEC Article 800, UL 444 Type CMP Rating FT6, ETL verified to ANSI/TIA-568C.2, C(ETL)US, RoHS Compliant.

Marking on Jacket

2127105 4PR 23AWG SOLID CAT6A 500MHz FTP CMP 5011596(ETL) C(ETL) --- ETL VERIFIED TO ANSI/TIA 568C.2 ROHS COMPLIANT XXXXFT

PERFORMANCE

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACRF (dB/)	PS.NEXT (dB)	PS.ACRF (dB)	RL (dB)	Delay (ns/100m)	Skew (ns/100m)
1	2.1	74.3	67.8	72.3	64.8	20.0	570	45
4	3.8	65.3	55.8	63.3	52.8	23.0	552	
8	5.3	60.8	49.7	58.8	46.7	24.5	547	
10	5.9	59.3	47.8	57.3	44.8	25.0	545	
16	7.5	56.2	43.7	54.2	40.7	25.0	543	
20	8.4	54.8	41.8	52.8	38.8	25.0	542	
25	9.4	53.3	39.8	51.3	36.8	24.3	541	
31.25	10.5	51.9	37.9	49.9	34.9	23.6	540	
62.5	15.0	47.4	31.9	45.4	28.9	21.5	539	
100	19.1	44.3	27.8	42.3	24.8	20.1	538	
200	27.6	39.8	21.8	37.8	18.8	18.0	537	
250	31.1	38.3	19.8	36.3	16.8	17.3	536	
300	34.3	37.1	18.3	35.1	15.3	16.8	536	
400	40.1	35.3	15.8	33.3	12.8	15.9	536	
500	45.3	33.8	13.8	31.8	10.8	15.2	536	

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