

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 Tinned Copper

23 AWG

0.023 in. (0.585 mm \pm 0.006)

Insulation

Outer Diameter

SAMP® FEP

0.044 in. (1.12 mm \pm 0.5)

Construction

Tape

PE Tape (20/0.025 mm)

Drain Wire

Solid Tin Copper

Shield (100% coverage with 25% overlapping)

Aluminum/Poly Tape

Divider (Pair Separator)

Yes, SAMP® FEP CROSSWEB

Ripcord

Yes, Kevlar

Jacket

Outer Diameter

Plenum PVC

0.268 in. \pm 0.012 (6.8 mm \pm 0.3)

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

Mechanical Characteristics

Rated Temperature (°C)

-20°C to 80°C

Voltage Rating

30 V

Capacitance

5.6nF/100m Nominal

Velocity of Propagation (VPN)

\geq 65 %

Max. Conductor D.C.R.

9.38 Ω /100m Nominal

Max. D.C.R. Unbalance

\leq 5%

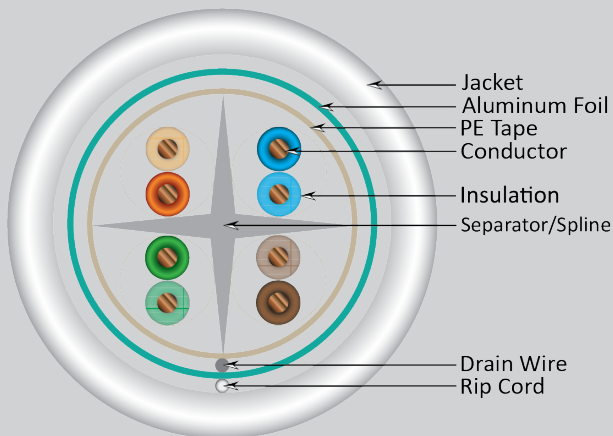


DESCRIPTION

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-568.2-D 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. 07/2025

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%
251 MHz - 550 MHz	100 ± 25%

Ratings

NEC Article 800, UL 444 Type CMP Rating FT6, ETL verified to ANSI/TIA-568.2-D, C(ETL)US, RoHS Compliant.

Marking on Jacket

4PR 23AWG SOLID CAT6A 550MHz F/UTP CMP FT6 75C 5011596(ETL)C(ETL).....ETL VERIFIED TO ANSI/TIA-568.2-D
02/25/2023 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	1.9	65.0	64.2	62.0	61.2	19.1	521	44
4	3.5	64.1	52.1	61.8	49.1	21.0	504	
8	5.0	59.4	46.1	57.0	43.1	21.0	500	
10	5.5	57.8	44.2	55.5	41.2	21.0	498	
16	7.0	54.6	40.1	52.2	37.1	20.0	496	
20	7.8	53.1	38.2	50.7	35.2	19.5	495	
25	8.8	51.5	36.2	49.1	33.2	19.0	495	
31.25	9.8	50.0	34.3	47.5	31.3	18.5	494	
62.5	14.0	45.1	28.3	42.7	25.3	16.0	492	
100	18.0	41.8	24.2	39.3	21.2	14.0	491	
200	26.1	36.9	18.2	34.3	15.2	11.0	490	
250	29.5	35.3	16.2	32.7	13.2	10.0	490	
300	32.7	34.0	14.6	31.4	11.6	9.2	490	
400	38.4	32.0	12.1	29.3	9.1	8.0	490	
500	43.8	30.4	10.2	27.6	7.2	8.0	490	
550	46.3	29.7	9.4	26.9	6.4	8.0	489	

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