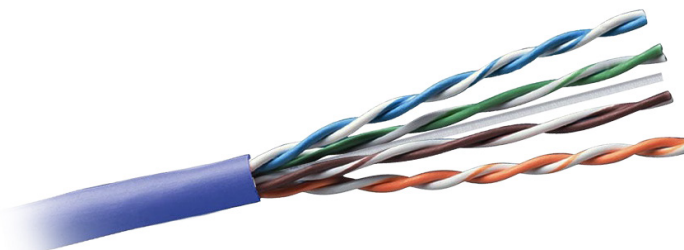


Category 6A Unscreened Cable

KEY FEATURES

- ANSI/TIA 568-C.2 category 6A verified
- Complies with ISO/IEC 11801 2nd Ed. category 6A
- UL listed CMP & CMR
- Reach & RoHS 2 compliant
- Supports PoE up to 100 Watts



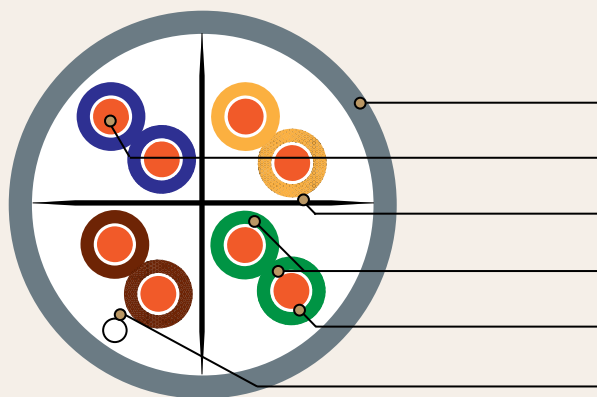
23AWG Plenum, unshielded four twisted pairs, Category 6A Horizontal Cable Tested to 500 MHz. Supports all category 6A applications including Ethernet 10 Gigabit, 100BASETX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422.

CATEGORY 6A UNSCREENED CABLE

PART NUMBER	DESCRIPTION
BC6A-2111D-CC	Category 6A U/UTP 4 pair 23 AWG solid cable, CMP, 1,000 ft (305 m)
BC6A-2121D-CC	Category 6A U/UTP 4 pair 23 AWG solid cable, CMR, 1,000 ft (305 m)
BC6A-2111F-CC	Category 6A U/UTP 4 pair 23 AWG solid cable, CMP, 1,000 ft (305 m), USA Made
BC6A-2121F-CC	Category 6A U/UTP 4 pair 23 AWG solid cable, CMR, 1,000 ft (305 m), USA Made

Specify cable jacket color by substituting CC in P/N for the following: WH BU
For other cable jacket colors, contact customer service.

CABLE CONSTRUCTION DETAIL



BC6A-21XXE

- OUTER JACKET
- SOLID CONDUCTOR
- PAIR SEPARATOR
- TWISTED PAIR
- INSULATION
- RIP CORD

Cable jacket is not Signamax-branded and is supplied in a plain brown or white box.

SPECIFICATIONS

ELECTRICAL

Maximum Delay Skew: 45 ns/100 m

Input Impedance:

1-100 MHz: 100±15 Ohm

101-250 MHz: 100±22 Ohm

Mutual Capacitance: 14 pF/ft Nominal

Capacitance Unbalance: 330 pF/ft maximum

Maximum Conductor D.C.R.: 28.6Ω/1,000 ft

Maximum D.C.R. Unbalance: 3%

Maximum Delay Skew: 45 ns/100m

Characteristic Impedance:

From 0.772 MHz - 100 MHz 100Ω ± 15%

From 100 MHz - 200 MHz 100 ± 22%

From 200 MHz - 500 MHz 100 ± 32%

Minimum bend radius: 1.250 in.

CONSTRUCTION

Conductor Size: 23 AWG

Conductor Material: Solid bare copper

Pair Count: 4 Pairs

Jacket Material: Low-smoke Flame Retardant
Plenum Polymer

Plastic Materials:

Plenum: CMP rated flame-retardant PVC

Riser: CMR rated flame-retardant PVC

Overall Cable Diameter: 0.255 in (6.48 mm)

Approximate Cable Weight: 45 lb

Packaging: 1,000 ft (305 m)

ENVIRONMENTAL

Temperature:

Installation: 0°C to 50°C (32°F to 122°F)

Storage: -40°C to 75°C (-40°F to 167°F)

Operating: -2°C to 60°C (28°F to 140°F)

Velocity of

Propagation: 72%

RATINGS/APPROVALS:

NEC Article 800, ANSI/TIA/EIA 568C.2 Category 6A, 11801:2002

Category 6A, UL 910:CMP Rating, C(ETL)US, RoHS Compliant

APPLICATIONS

Ethernet: IEEE 802.3u (100 Mbps), IEEE 802.3ab (1 Gbps), IEEE 802.3bz (2.5/5Gbps); ATM: 622 Mbps, 1000 Mbps; PoE: IEEE 802.3af (15 W), IEEE 802.3at (30 W+), IEEE 802.3bt Type 3 (60 W ++), IEEE 802.3bt Type 4 (100 W ++)

TRANSMISSION PERFORMANCE

400FREQUENCY (MHz)	INSERTION LOSS, DB	NEXT LOSS, DB	PSNEXT LOSS, DB	RETURN LOSS	ACRF, DB	PSACRF, DB	PROP. DELAY	PSANEXT, DB	PSAACRF, DB
	TIA ¹	TIA ¹	TIA ¹	TIA ¹	TIA ¹	TIA ¹	TIA ¹	TIA ¹	TIA ¹
1	2.0	74.3	72.3	20.0	67.8	64.8	570.0	67.0	67.0
4	3.8	65.3	63.3	23.0	52.8	52.8	552.0	67.0	66.2
8	5.3	60.8	58.8	24.5	46.7	46.7	546.7	67.0	60.1
10	5.9	59.3	57.3	25.0	44.8	44.8	545.4	67.0	58.2
16	7.4	56.2	54.2	25.0	40.7	40.7	543.0	67.0	54.1
20	8.3	54.8	52.8	25.0	38.8	38.8	542.0	67.0	52.2
25	9.3	53.3	51.3	24.3	36.8	36.8	541.2	67.0	50.2
31.25	10.5	51.9	49.9	23.6	34.9	34.9	540.4	67.0	48.3
62.5	14.9	57.4	45.4	21.5	28.9	28.9	538.6	65.6	42.3
100	19.1	44.3	42.3	20.1	24.8	24.8	537.6	62.5	38.2
155	24.0	41.4	39.4	18.8	21.0	21.0	536.9	59.6	34.4
200	27.5	39.8	37.8	18.0	18.8	18.8	536.5	58.0	32.2
250	31.0	38.3	36.3	17.3	16.8	16.8	536.3	56.5	30.2
300	34.2	37.1	35.1	16.8	15.3	15.3	536.1	55.3	28.7
350	37.2	36.1	34.1	16.3	13.9	13.9	535.9	54.3	27.3
400	40.0	35.3	33.3	15.9	12.8	12.8	535.8	53.5	26.2
500	45.2	33.8	31.8	15.2	10.8	10.8	535.6	52.0	24.2

1: ANSI/TIA-568-C.2 horizontal cable transmission performance limits