

**CATEGORY 6 PLENUM CABLE, 4 PAIR, UTP, UL CMP**

**Product Description**

- U/UTP, 23AWG solid bare copper, CAT.6, CMP
- With cross filler
- With rip cord

**Product Features**

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 550 MHz.
- Reel in Box
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Part Number:	Jacket Color:
CAT6-P-BK	Black
CAT6-P-BL	Blue
CAT6-P-GN	Green
CAT6-P-GY	Gray
CAT6-P-PUR	Purple
CAT6-P-WT	White
CAT6-P-YL	Yellow

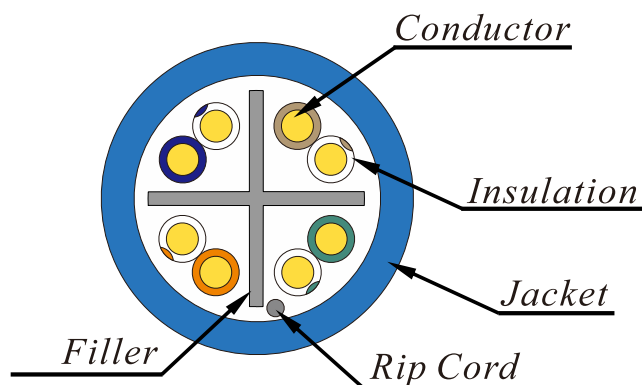
**Application**

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- IEEE 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+) / IEEE 802.3bt (PoE++) Type 1,2,3

**Applicable Standard**

- Electrical Transmission
  - ANSI/TIA-568.2-D (2018)
  - ISO/IEC 11801-1
  - IEC 61156-5 (Edition 2.1)
- Flame Test
  - NFPA 262 (CMP)
- Material and Construction
  - UL 444
  - CSA 22.2 NO.214
- EU Directive 2011/65/EU & 2015/863/EU
- EU Directive 2006/95/EC (LVD)

**Sectional Drawing**



## **Material and Construction**

Conductor	Material	23AWG solid bare copper	
Insulation	Material	Fluorinated Ethylene Propylene (FEP)	
	Color code & diameter	Blue & white/blue Stripe	0.95 ± 0.02 mm
		Orange & white/orange stripe	0.92 ± 0.02 mm
		Green & white/green stripe	0.94 ± 0.02 mm
	Brown & white/brown stripe	0.92 ± 0.02 mm	
Twisted	Description	Left hand direction	
Filler	Material	Polyolefin (PO)	
Assembly	Description	Left hand direction	
Rip cord	Material	Polyester multi-yarn	
Jacket	Material	Low smoke flame retardant polyvinyl chloride (LSFRPVC)	
	Diameter	5.6 ± 0.2 mm	
	Thickness	0.38 ± 0.03 mm	
	Color	Per customer's request	
Marking	STRUCTURED CABLE PRODUCTS --- CAT6-P --- E198134-W CAT6 ENHANCED 550 MHz 4PR 23AWG SOLID BC UTP C(UL)US CMP 75 °C --- VERIFIED TO ANSI/TIA-568.2-D ISO/IEC 11801-1 CLASS E RoHS ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 XXXXFT AB YYYYMMDD Note 1: YYYYMMDD is date code.		

## **Usage & Environmental Condition**

Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius	≥ 4 times of overall diameter	
Maximum pulling tension	≤ 110 N	

## **Physical & Electrical Characteristics (at 20°C)**

Temperature rating	75°C
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω /100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ• km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

## ***Transmission Performance (at 20°C)***

Frequency (MHz)	IL Max. dB/100m	NEXT Min. dB/100m	PS.NEXT Min. dB/100m	ACR Min. dB/100m	PS.ACR Min. dB/100m	ACRF Min. dB/100m	PS.ACRF Min. dB/100m	RL Min. dB/100m	Propagation Delay Max. ns/100m	Delay Skew Max. ns/100m
1	2.03	74.30	72.30	72.28	70.28	67.80	64.80	20.00	570.00	45.00
4	3.78	65.27	63.27	61.49	59.49	55.76	52.76	23.01	552.00	
8	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	546.73	
10	5.95	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545.38	
16	7.55	56.24	54.24	48.68	46.68	43.72	40.72	25.00	543.00	
20	8.47	54.78	52.78	46.31	44.31	41.78	38.78	25.00	542.05	
25	9.51	53.33	51.33	43.83	41.83	39.84	36.84	24.32	541.20	
31.25	10.67	51.88	49.88	41.20	39.20	37.90	34.90	23.64	540.44	
62.5	15.38	47.36	45.36	31.98	29.98	31.88	28.88	21.54	538.55	
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	
150	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	536.94	
200	28.98	39.78	37.78	10.80	8.80	21.78	18.78	18.00	536.55	
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	
300	36.43	37.14	35.14	0.72	N.A.	18.26	15.26	16.77	536.08	
350	39.79	36.14	34.14	N.A.	N.A.	16.92	13.92	16.30	535.92	
400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	
450	46.01	34.50	32.50	N.A.	N.A.	14.74	11.74	15.53	535.70	
500	48.94	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	
550	51.76	33.19	31.19	N.A.	N.A.	12.99	9.99	14.92	535.54	

Values above 250MHz are for information only.

## ***Shipping Information***

Item	Dimension	Nominal net weight
Cable	305 m	12.16 kg (26.81 lb)
RIB	L324 x W292 x H324 mm	2.7 kg
RIB Carton	L334 x W301 x H359 mm	1.5 kg
Pallet	1260 x1050 x120 mm	14.1 kg

Container type	Capacity of pallet	Pallet of carton	Capacity of carton
20 feet	20	36/24	600
40 feet	40	36/24	1200