



Part Number: 1874A

CAT6+ Horizontal Bonded-Pair, 4pr, UTP, LS-PVC Jkt, CMP

# **Product Description**

CAT6+ (350MHz), 4-Bonded-pairs, U/UTP-unshielded, Plenum-CMP, Premise Horizontal cable, 23 AWG solid bare copper conductor, FEP insulation, ripcord, Flamarrest® jacket

# **Technical Specifications**

### **Product Overview**

Environmental Space:	Plenum
Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments

## **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4
Condu	ctor Count:		8
Total N	Number of Pa	airs:	4
Condu	ctor Size:		23 AWG

### Insulation

#### **Color Chart**

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

#### Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Ripcord
LS PVC - Low Smoke Polyvinyl Chloride	Flamarrest®	0.365 x 0.165 in	Yes

### **Electrical Characteristics**

#### Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
75 Ohm/km	3 %

### Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
49 pF/100m	15 pF/ft

# Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	25 ns/100m	72 %

# High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	1.9 dB/100m	75.3 dB	75.3 dB	73.4 dB	73.4 dB	67.8 dB	64.8 dB	20.0 dB	100 ± 12 Ohm	100 ± 15 Ohm
4 MHz	3.7 dB/100m	66.3 dB	66.3 dB	62.6 dB	62.6 dB	55.7 dB	52.8 dB	23.0 dB	100 ± 12 Ohm	100 ± 15 Ohm
8 MHz	5.3 dB/100m	61.8 dB	61.8 dB	56.5 dB	56.5 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 12 Ohm	100 ± 15 Ohm
10 MHz	5.9 dB/100m	60.3 dB	60.3 dB	54.4 dB	54.4 dB	47.8 dB	44.8 dB	25.0 dB	100 ± 12 Ohm	100 ± 15 Ohm
16 MHz	7.5 dB/100m	57.2 dB	57.2 dB	49.7 dB	49.7 dB	43.7 dB	40.7 dB	25.0 dB	100 ± 12 Ohm	100 ± 8 Ohm
20 MHz	8.4 dB/100m	55.8 dB	55.8 dB	47.3 dB	47.3 dB	41.8 dB	38.8 dB	25.0 dB	100 ± 12 Ohm	100 ± 8 Ohm
25 MHz	9.5 dB/100m	54.3 dB	54.3 dB	44.9 dB	44.9 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 8 Ohm
31.25 MHz	10.6 dB/100m	52.9 dB	52.9 dB	42.2 dB	42.2 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 8 Ohm
62.5 MHz	15.4 dB/100m	48.4 dB	48.4 dB	33.0 dB	33.0 dB	31.8 dB	28.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 8 Ohm
100 MHz	19.8 dB/100m	45.3 dB	45.3 dB	25.5 dB	25.5 dB	27.8 dB	24.8 dB	21.0 dB	100 ± 15 Ohm	100 ± 8 Ohm
155 MHz	25.1 dB/100m	42.4 dB	42.4 dB	17.3 dB	17.3 dB	24.0 dB	21.0 dB	21.0 dB	100 ± 15 Ohm	100 ± 8 Ohm
200 MHz	29.0 dB/100m	40.8 dB	40.8 dB	11.8 dB	11.8 dB	21.7 dB	18.8 dB	21.0 dB	100 ± 15 Ohm	100 ± 8 Ohm
250 MHz	32.8 dB/100m	39.3 dB	39.3 dB	6.5 dB	6.5 dB	19.8 dB	16.8 dB	18.0 dB	100 ± 20 Ohm	100 ± 8 Ohm
300 MHz	36.4 dB/100m	38.1 dB	38.1 dB	1.7 dB	1.7 dB	18.3 dB	15.3 dB	18.0 dB	100 ± 20 Ohm	100 ± 8 Ohm
310 MHz	39.8 dB/100m	37.1 dB	37.1 dB	-2.6 dB	-2.6 dB	16.9 dB	13.9 dB	17.0 dB	100 ± 22 Ohm	100 ± 8 Ohm
350 MHz	43.0 dB/100m	36.3 dB	36.3 dB			15.8 dB	12.8 dB	14.0 dB	100 ± 32 Ohm	100 ± 8 Ohm
400 MHz	46.0 dB/100m	35.5 dB	35.5 dB			14.7 dB	11.7 dB	14.0 dB	100 ± 32 Ohm	100 ± 8 Ohm
500 MHz	48.9 dB/100m	34.8 dB	34.8 dB			13.8 dB	10.8 dB	14.0 dB	100 ± 32 Ohm	100 ± 8 Ohm
550 MHz	51.8 dB/100m	34.2 dB	34.2 dB			13.0 dB	10.0 dB	14.0 dB	100 ± 32 Ohm	100 ± 8 Ohm

## Voltage

UL Voltage Rating 300 V RMS

# **Temperature Range**

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

# **Mechanical Characteristics**

Bulk Cable Weight:	35 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	0.5 in
Min Bend Radius/Installation:	1.75 in

# Standards

NEC/(UL) Specification:	MP		
CEC/C(UL) Specification:	CMP		
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class E		
CPR Euroclass:	ca		
Data Category:	ategory 6		
ANSI Compliance:	116-732-2013 Category 6, ANSI/NEMA WC-66 Category 6		
Telecommunications Standards:	NSI/TIA-568-C.2 Category 6		
IEEE Specification:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4		
Third Party Performance Verification:	Category 6		

# **Applicable Environmental and Other Programs**

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes

EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2006-07-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

#### **Suitability**

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

### Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262 Plenum (UL 910)
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes	

#### **Part Number**

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### Variants

Item #	Color	Footnote
1874A 0101000	Black	С
1874A D151000	Blue	С
1874A D15A1000	Blue	
1874A F6H1000	Gray	С
1874A F6HA1000	Gray	
1874A 005A1000	Green	
1874A 8771000	Natural	С
1874A 877A1000	Natural	
1874A 003A1000	Orange	
1874A 0071000	Purple	С
1874A 007A1000	Purple	
1874A 002A1000	Red	
1874A 0091000	White	С
1874A 009A1000	White	
1874A 004A1000	Yellow	

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

#### **Product Notes**

Notes:	Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0.

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