

● CAT6A AWG23 F/UTP HD Digital Communication Cable

■ Description

- Rated temperature: 75°C
- Reference standard: UL444, UL1685, TIA-568-C.2, IEC 61156-5 & ISO 11801
- Product standard certification: UL
- Flame test: CM (UL1685)
- Solid bare copper conductor
- Colour-coded PE insulation
- PVC Jacket
- Packaging: Per customer request

■ Application

- 100Base-T4; 100Base-TX
- 100VG-AnyLAN; 1000 Base-T
- 1000Base-TX; HDBaseT
- 155Mbps ATM; 622Mbps ATM
- 10 Gb Ethernet

■ Product figure



■ Physical characteristics

Structure	Construction	F/UTP
	Pairs	4
Conductor	AWG	23 AWG
	Conductor material	Solid bare copper
	Conductor nominal dimension	0.566 mm
Insulation	Insulation material	PE
	Insulation nominal dimension	1.14 mm
	Number colour	White/ Blue(Stripe)-Blue
	(Stripe marking)	White /Orange(Stripe)-Orange
		White /Green(Stripe)-Green White / Brown(Stripe)-Brown
Cabling	Twisting lay length	≤30mm
	Cabling lay length	≤200mm
Filler	Filler material	Yes
Binder	Binder material	Polyester tape
Shield	Individual shield & material	N/A
	Primary overall shield & material	AL-Foil
	Secondary overall shield &	N/A
	Drain wire Nom	26AWG solid tinned copper
	Shield coverage (%)	100%
Outer jacket	Outer jacket material	PVC
	Overall nominal dimension	7.9 mm
	Outer jacket rip cord	Yes
	Outer jacket colour	Yellow
Mechanical characteristics	Operating temperature range	-20°C ~ +75°C
	Bulk cable nominal weight	64 kg/km
	Max. recommended pulling	110 N
	Min. bend radius (Install)	8 x O.D.
	Outer jacket tensile strength	≥ 13.8 MPa
	Outer jacket elongation	≥ 100%
	Outer jacket aging condition	100 °C x 168 hrs
	After aging, Tensile strength	≥ 75% of unaging
	After aging, Elongation	≥ 50% of unaging
	Cold bend	No crack (@ -20°C x 4hrs)
	Electrical characteristics	Nom. mutual capacitance
Pair to ground capacitance		≅ 330 pF/100M
Nominal velocity of propagation		65%
Max. delay skew		45 ns/100m
Max. conductor DC resistance		93.8 Ω/km (@ 20 °C)
Max. Conductor resistance		2% (@ 20°C)
Min. insulation resistance		5000 MΩ/km
Max. operating voltage - UL	300 V	



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■ Marking

HUAXUN HDBaseT™ CABLE F/UTP 23AWG 4PAIR C(UL)US CM E314032-★ Tested to 550MHz ANSI/TIA-568-C.2 CE RoHS
 AREA A B C D E F G DEVICE 0 1 2 3 4 5 6 7 8 9 ***METER YYMMDDJJNN

■ Electrical characteristics

Frequency	Input (Unfitted) Impedance	Fitted Impedance	ATT	RL	NEXT	PS NEXT	ELFEXT	PSELFEXT	ACR	PSACR	PD
(MHz)	(Ω)	(Ω)	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	Max (nxs/100m)
1	100±15	100±15	2.0	20.0	75.3	73.3	70.8	67.8	73.3	72.3	537
10	100±15	100±15	5.8	25.0	60.3	58.3	50.8	47.8	56.0	55.0	
62.5	100±15	100±15	15.0	21.5	48.4	46.4	34.9	31.9	34.1	33.1	
100	100±15	100±15	19.3	20.8	45.3	43.3	30.8	27.8	26.5	25.5	
200	100±22	100±15	28.3	18.7	40.8	38.8	24.8	21.8	12.6	11.6	
300	100±32	100±15	35.6	17.5	38.1	36.1	21.3	18.3	2.5	1.5	
400	100±32	100±15	42.0	16.6	36.3	34.3	18.8	15.8	-	-	
500	100±32	100±15	47.9	15.9	34.8	32.8	16.8	13.8	-	-	
550	100±32	100±15	50.6	15.6	-	-	-	-	-	-	

Frequency	Min.TCL	Min.ELTCTL
(MHz)	(dB)	(dB)
1	40.0	35.0
31.25	35.1	5.1
62.5	32.0	-
100	30.0	-
250	26.0	-

