



UTP CAT 5E SPECIFICATION

CUSTOMER :

CUSTOMER P/N :

DESCRIPTION : UTP CAT.5E 4PR 24AWG CABLE

VENDOR P/N : SN0779

REV. NO : 911216

DATE :

PART NO : 91B0444-1

(Check) : _____ (Engineer) : _____

THE SPECIFICATION OF UTP CAT.5E 4 PR 24AWG CABLE

1. Scope

This specification describes a high speed data communication cable construction consisting of four twisted pair, and PVC jacket.

2. Safety Standards

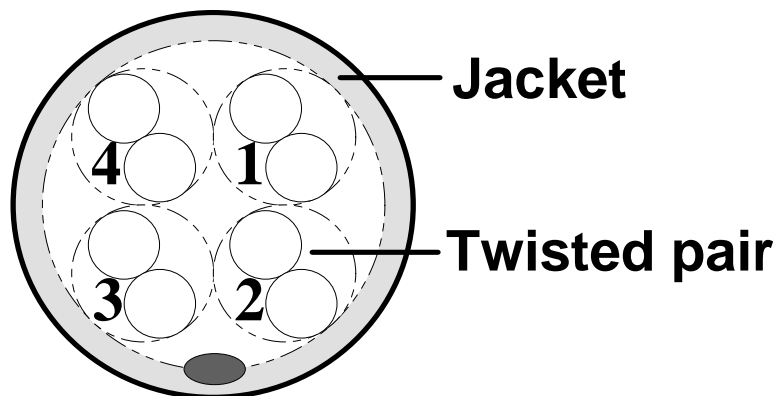
According to UL444 Communications Cables,UL AWM Style 2835.

3. Reference Standards

TIA/EIA 568B.2, ISO 11801

4. Construction

4.1 Configuration



Twisted Pairs Color Code

1. Orange, White/Orange
2. Blue, White/Blue
3. Brown, White/Brown
4. Green, White/Green

4.2 Component

- | | |
|--------------------------------|--|
| a. Size of conductor | : AWG 24 (Stranded Anneal copper wire) |
| b. Dielectric material | : Polyethylene |
| c. Diameter of Dielectric core | : 0.93 ± 0.05 mm |
| d. Number of twist pairs | : Four pairs.
Each one of four pairs with different pitch |

4.3 Assembly

: Four pairs of dielectric core shall be stranded in circular form.

4.4 Jacket material

: PVC, flame retardant and / or CM grade .

Overall Diameter

: Ave. 5.3 ± 0.2 mm.



5. Electrical Property

- a. Capacitance : nom. 15.2 pf/ft
- b. Velocity of propagation : nom. 67%
- c. Operating temperature : -20° ~ 80°
- d. DC(Loop) resistance of conductor : nom. 178.6Ω/km at 20°
- e. Characteristic impedance : nom. Impedance 100±15Ω
- f.

Frequeuncy	Atten.	NEXT	PSNEXT	ELFEXT	PSELFEXT	Return Loss	Propagation Delay	Delay Skew
(MHz)	dB/100m	dB	dB	dB	dB	dB	ns	ns
1	2.05	65.30	62.30	63.80	60.80	20.00	570.00	45
4	4.07	56.27	53.27	51.76	48.76	23.01	543.00	
8	5.79	51.75	48.75	45.74	42.74	24.52	538.50	
10	6.49	50.30	47.30	43.80	40.80	25.00	537.60	
16	8.28	47.24	44.24	39.72	36.72	25.00	536.25	
20	9.31	45.78	42.78	37.78	34.78	25.00	535.80	
25	10.47	44.33	41.33	35.84	32.84	24.32	535.44	
31.25	11.77	42.88	39.88	33.90	30.90	23.64	535.15	
62.5	17.07	38.36	35.36	27.88	24.88	21.54	534.58	
100	22.07	35.30	32.30	23.80	20.80	20.11	534.36	
200	32.55	30.78	27.78	17.78	14.78	18.00	534.18	
250	37.00	29.33	26.33	15.84	12.84	17.32	534.14	
300	41.13	28.14	25.14	14.26	11.26	16.77	534.12	
350	45.02	27.14	24.14	12.92	9.92	16.30	534.10	

6. Physical Property

Tensile strength and Elongation for Polyethylene insulation and PVC Jacket

Tensile strength : Polyethylene.....min 1400psi
 Jacket.....min 1500psi

Elongation : Polyethylene.....min 350%
 Jacket.....min 100%

After aging

Tensile strength : Polyethylene75 % of before aging
 Jacket.....70 % of before aging

Elongation : Polyethylene.....75 % of before aging
 Jacket.....65 % of before aging

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