CAT5E F/UTP 24AWG 4PAIR PVC

STANDARDS

ANSI/TIA-568-C.2, IEC 61156-5
EN 50288-2-1
EN 50173
ISO/IEC 11801
EN 50575

APPLICATIONS

10BASE-T (IEEE 802.3)
4/16 Mbps TOKEN RING (IEEE 802.5)
100BASE-VG-AnyLAN
100 Mbps TP-PMD (ANSI X3T9.5)
100BASE-T (IEEE 802.3)
55/155 Mbps ATM
1000BASE-T (Gigabit Ethernet)

CERTIFICATION

COLOR CODES

Insulation Color:

P1: White / Blue & Blue
P2: White / Orange & Orange
P3: White / Green & Green
P4: White / Brown & Brown

Jacket Color:

Opiton

CABLE PRINTING

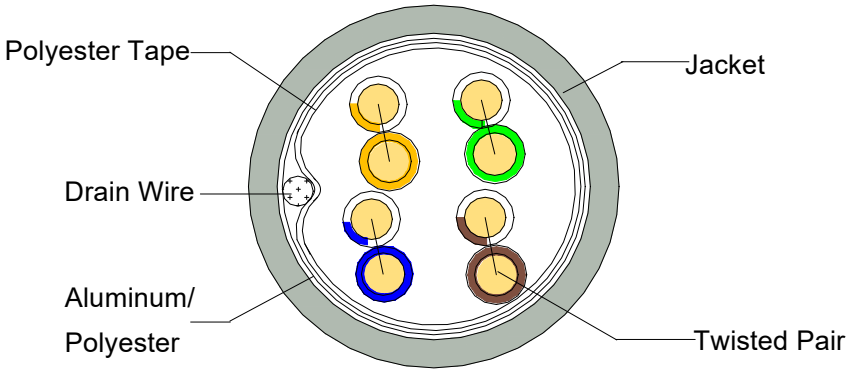
Option

PACKAGING

1. Reel/ 305m
2. Reel/ 500m

TEST REQUIREMENT

Pass fluke 90m permanent link test
TIA-568-C.2



CONSTRUCTION

Conductor Material		99.99% Solid Bare Copper
Conductor Number		8C(4 pairs)
Cable AWG		24
Construction(±0.01mm)		1/0.51
Wrapping tape Overlap		Polyester Tape ≥25%
Drain Wire (1/0.40)		Tinned copper
Shield Overlap		aluminum/polyester ≥25%
Insulation	Material	PE
	Nom. Thickness(mm)	0.27
	Diameter(±0.05mm)	1.05
Jacket	Material	PVC
	Nom. Thickness(mm)	0.50
	Diameter(±0.30mm)	6.30

ELECTRICAL PERFORMANCE

Max. Conductor DC Resistance (Ω/km)		93
Min. Insulation Resistance (MΩ-KM)		5000
Dielectric Strength		DC-1KV/1 Min
1.0-100MHZ Characteristic Impedance(ohms)		100Ω±15Ω
1.0-100MHZ Delay Skew(ns/100m)		≤45
Pair to Ground Capacitance Unbalance(PF/100m)		≤330
Resistance Unbalance between pairs (%)		≤4
Max Mutual Capacitance		5.6nF/100m
Max DC Loop Resistance		19.2Ω/100m
Before Aging	Tensile Strength(Mpa)	≥13.5
	Elongation(%)	≥100
After Aging 100℃*24h*7d	Tensile Strength(Mpa)	≥75%
	Elongation(%)	≥50
Velocity of Propagation NVP		69%

Freq.	ATTN	RL	NEXT	ELFEXT	PS NEXT	PS ELFEXT
(MHz)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)
1	2.0	20.0	65.3	63.8	62.3	60.8
4	4.1	23.3	56.3	51.7	53.3	48.7
10	6.5	25.0	50.3	43.8	47.3	40.8
16	8.2	25.0	47.3	39.7	44.2	36.7
20	9.3	25.0	45.8	37.7	42.8	34.7
31.25	11.7	23.6	42.9	33.9	39.9	30.9
62.5	17.0	21.5	38.4	27.8	35.4	24.8
100	22.0	20.0	35.3	23.8	32.3	20.8

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TIA Cat 5e Perm. Link

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Insertion Loss	NEXT	RL	ACR-N	ACR-F	PS NEXT	PS ACR-N	PS ACR-F
	Ω	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	60.0	19.0	57.0	58.6	57.0	54.0	55.6
12345678					4	3.9	54.8	19.0	50.9	46.6	51.8	47.9	43.6
					8	5.5	50.0	19.0	44.5	40.6	47.0	41.5	37.6
12345678S					10	6.2	48.5	19.0	42.3	38.6	45.5	39.3	35.6
12345678S					16	7.9	45.2	19.0	37.3	34.5	42.2	34.3	31.5
					20	8.9	43.7	19.0	34.8	32.6	40.7	31.8	29.6
					25	10	42.1	18.0	32.1	30.7	39.1	29.1	27.7
					31.25	11.2	40.5	17.1	29.3	28.7	37.5	26.3	25.7
					62.5	16.2	35.7	14.1	19.4	22.7	32.7	16.4	19.7
					100	21	32.3	12.0	11.3	18.6	29.3	8.3	15.6

Approved By		*Designed By*	