



NEX1 Technologies Co., Ltd

SPECIFICATION FOR APPROVAL

DOCUMENT : TUL2425N04

STYLE : 60°C 300V
COMMUNICATION CABLE

SIZE: UTP 24AWG X25P (SOLID)
100 CAT 5 LSOH

RECOGNIZED: UL、CSA



NEX1 Technologies Co., Ltd

SPECIFICATION

STYLE	75°C 300V COMMUNICATION CABLE	DOCUMENT NO : TUL2425N04
SIZE	UTP 24AWG×25P	ESTABLISHED DATE : 2007/11/27

STANDARD : ISO/IEC 11801 & IEC 332 754 1034 811 HD 624.7 & TIA/EIA-568-B

APPLICATION : LOCAL AREA NETWORK CABLE ARE SUITABLE FOR
PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR
HORIZONTAL NETWORK

CONSTRUCTION :

CONDUCTOR	SIZE	24AWG × 25P
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1/0.540±0.030 mm
INSULATION	AVG. THICK.	0.215 mm
	MIN. THICK.	0.205 mm
	DIAMETER	0.97 ± 0.02 mm
	MATERIAL	HDPE
	COLOR CODES	1.PRIMARY: BLACK,RED,WHITE,YELLOW,VIOLET 2.SECONDARY: BLUE,ORANGE,GREEN,BROWN,GREY
SHIELDED	PAIR STRANDED	2 CORES STRANDED
	ASSEMBLY STRANDED	3 PAIRS STRANDED × 3 GROUPS
	ASSEMBLY STRANDED	4 PAIRS STRANDED × 4 GROUPS
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	ASSEMBLY STRANDED	7 GROUPS STRANDED
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JACKETED	AVG. THICK.	0.77 mm
	MIN. THICK.	0.70 mm
	DIAMETER	13.0 ± 0.30 mm
	MATERIAL	LSOH
	COLOR	GRAY OR OTHER COLOR

AK001/210×297/1.0

EDITION : 1.0

MAKER : *H. C. KUO* CONFIRM : *C. Y. Chen*

REVISED DATE :

APPROVAL : *W. J. Wang*

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ELECTRICAL & PHYSICAL PROPERTIES :			
ITEM		24AWG × 25P	
RATING TEMP VOLTAGE		60°C 300V	
CONDUCTOR RESISTANCE		93.8 OHM/Km/20°C MAX.	
MUTUAL CAPACITANCE		56 pF/M MAX.	
DIELECTRIC STRENGTH		AC 1.5 KV/MIN.	
SPARK TEST		2.5 KV	
INSULATION	UNAGED	TENSILE STRENGTH	2176 PSI MIN. (1.53 Kg/m m ²)
		ELONGATION	300% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 75%(100°C×48HRS)
		ELONGATION	UNAGED MIN. 75%(100°C×48HRS)
JACKETED	UNAGED	TENSILE STRENGTH	1306 PSI MIN.(0.92 Kg/m m ²)
		ELONGATION	125% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 75%(100°C×168HRS)
		ELONGATION	UNAGED MIN. 70%(100°C×168HRS)
INSULATION SHRINKBACK		5% MAX (AT130°C×1HR)	
COLD BEND TEST		-20°C×4HRS NO.CRACK	
FLAME RETARDANT TEST		IEC 60332-1	
ACID GAS EVOLUTION		PH ≥ 4.3	
SMOKE GENERATION		60% MIN(TRANSMISSION OF LIGHT)	
DC RESISTANCE UNBALANCE		5% MAX.	
PAIR-TO-GROUND CAPACITANCE UNBALANCE		3300 pF/Km MAX.	
STRUCTURAL RETURN LOSS		100 MHz 16.0dB MIN.	
PROPAGATION DELAY		100 MHz 538nS/100m MAX.	
DELAY SKEW		1 ~ 100 MHz 45nS/100m MAX.	
MARKING :			
100 E142890 LSOH UTP 25PR 24AWG VERIFIED (UL) CAT 5 CSA LL43774 XXXXXXFT			

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Electrical Performance

ITEM(d B) Frequency (MHz)	ATT MAX. (dB/100m)	NEXT MIN. (d B)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ELFEXT MIN. (dB/100m)	PS. ELFEXT MIN. (dB/100m)	SRL MIN. (d B)
1	2.0	62.3	60.3	60.3	58.3	60.8	57.8	23.0
4	4.1	53.3	49.2	51.3	47.2	48.7	45.7	23.0
8	5.8	48.8	43.0	46.8	41.0	42.7	39.7	23.0
10	6.5	47.3	40.8	45.3	38.8	40.8	37.8	23.0
16	8.2	44.3	36.1	42.3	34.1	36.7	33.7	23.0
20	9.3	42.8	33.5	40.8	31.5	34.8	31.8	23.0
25	10.4	41.3	30.9	39.3	28.9	32.8	29.8	22.0
31.25	11.7	39.9	38.2	37.9	26.2	30.9	27.9	21.1
62.5	17.0	35.4	18.4	33.4	16.4	24.8	21.8	18.1
100	22.0	32.3	10.3	30.3	8.3	20.8	17.8	16.0

