

SPECIFICATIONS FOR APPROVAL

DOCUMENT : TSM2404E07

STYLE: 75 300V
COMMUNICATION CABLE

SIZE: FTP 24AWG X4P (SOLID)
CAT 5e CM

APPROVED: UL. CSA.3P

Manufactured by:

NEX1 Technologies Co., Ltd.
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SPECIFICATIONS

STYLE	75 300V COMMUNICATION CABLE	DOCUMENT NO : TSM2404E07
SIZE	FTP 24AWG×4P	ESTABLISHED DATE : 2007/3/16
STANDARD : UL444,1581 & ISO/IEC 11801 & EN50173 & TIA/EIA-568-A-5 CAT 5e		
APPLICATION : LOCAL AREA NETWORK CABLE ARE SUITABLE FOR PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR HORIZONTAL NETWORK		
CONSTRUCTION :		
CONDUCTOR	SIZE	24AWG × 4P
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1.0/0.540±0.008 mm.
INSULATION	AVG. THICK.	0.250 mm.
	MIN. THICK.	0.230 mm.
	DIAMETER	1.030 ± 0.020 mm.
	MATERIAL	HDPE
	COLOR CODES	1. BLUE × WHITE/BLUE STRIPE 2. ORANGE × WHITE/ORANGE STRIPE 3. GREEN × WHITE/GREEN STRIPE 4. BROWN × WHITE/BROWN STRIPE
SHIELDED	PAIR STRANDED	2 CORES STRANDED
	FILLER (SLOT)	-----
	ASSEMBLY STRANDED	4 PAIR STRANDED
	MYLAR TAPE	20 × 0.025 ±0.002 mm.
	DRAIN WIRE	0.510 ±0.008 mm. (TINNED COPPER)
	AL-MYLAR TAPE	20 × 0.078 ±0.002 mm.
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JACKETED	AVG. THICK.	0.55 mm.
	MIN. THICK.	0.50 mm.
	DIAMETER	6.20 ± 0.20 mm.
	MATERIAL	PVC
	COLOR	GRAY OR OTHER COLOR



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AK001/210×297/1.0

EDITION : 1.0

REVISED DATE: March 16, 2007

MAKER : *C. Y. Chen*

CONFIRM : *S. N. Wong*

APPROVAL : *W. J. Wang*

SPECIFICATIONS

ELECTRICAL & PHYSICAL PROPERTIES :			
ITEM		24AWG × 4P	
RATING TEMP VOLTAGE		75 300V	
CONDUCTOR RESISTANCE		93.8 OHM/Km/20 MAX.	
MUTUAL CAPACITANCE		56 pF/M MAX.	
DIELECTRIC STRENGTH		AC 1.5 KV/2 SEC MIN.	
SPARK TEST		2.5 KV	
INSULATION	UNAGED	TENSILE STRENGTH	2400 PSI MIN. (1.69 Kg/m ²)
		ELONGATION	300% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 75%(100 ×48HRS)
		ELONGATION	UNAGED MIN. 75%(100 ×48HRS)
JACKETED	UNAGED	TENSILE STRENGTH	2000 PSI MIN. (1.41 Kg/m ²)
		ELONGATION	100% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 85%(100 ×240HRS)
		ELONGATION	UNAGED MIN. 50%(100 ×240HRS)
INSULATION SHRINKBACK		150m/m, 121 ± 1HR 9.5m/m	
COLD BEND TEST		-20 ±1HR NO.CRACK	
FLAME RETARDANT TEST		CM	
AC LEAKAGE CURRENT THROUGH OVERALL JACKET		AC 1500V 10 mA	
DC RESISTANCE UNBALANCE		5% MAX.	
PAIR-TO-GROUND CAPACITANCE UNBALANCE		3300 pF/Km MAX.	
CHARACTERISTIC IMPEDANCE		1 ~ 100 MHz 100±15 OHMS	
STRUCTURAL RETURN LOSS		100 MHz 16.0dB MIN.	
PROPAGATION DELAY		100MHz 538nS/100m MAX.	
DELAY SKEW		1 ~ 100 MHz 45nS/100m MAX.	
MARKING :			
NEX1 CAT 5e E142890 (UL) 75 FTP 4PR 24AWG CSA LL43774 3P VERIFIED TO TIA/EIA-568-A-5 XXXXXM www.nex1.com.tw			



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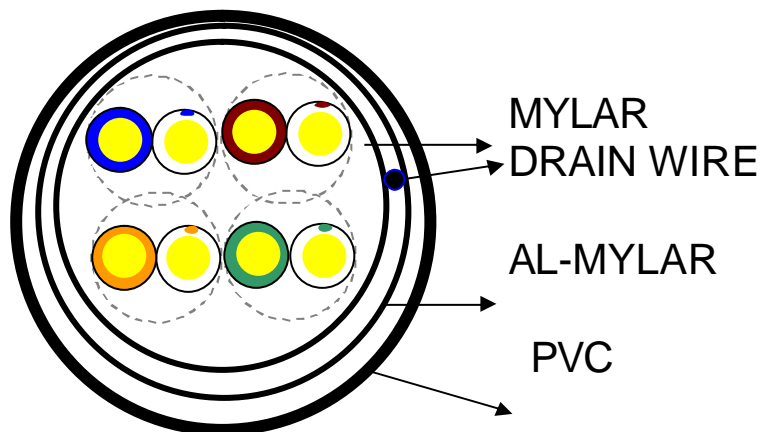
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Electrical Performance

ITEM (dB) Frequency (MHz)	ATT MAX. (dB/100m)	NEXT MIN. (dB)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ELFEXT MIN. (dB/100m)	PS. ELFEXT MIN. (dB/100m)	R.L. MIN. (dB)
1	2.0	65.3	63.3	62.3	60.3	63.8	60.8	20.0
4	4.1	56.3	52.2	53.3	49.2	51.7	48.7	23.0
8	5.8	51.8	46.0	48.8	43.0	45.7	42.7	24.5
10	6.5	50.3	43.8	47.3	40.8	43.8	40.8	25
16	8.2	47.3	39.1	44.3	36.1	39.7	36.7	25.0
20	9.3	45.8	36.5	42.8	33.5	37.8	34.8	25.0
25	10.4	44.3	33.9	41.3	30.9	35.8	32.8	24.3
31.25	11.7	42.9	31.2	39.9	28.2	33.9	30.9	23.6
62.5	17.0	38.4	21.4	35.4	18.4	27.8	24.8	21.5
100	22.0	35.3	13.3	32.3	10.3	23.8	20.8	20.1



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