

PRODUCTS FEATURE

- ELITE 10GS-F SUPPORTS IEEE 802.3an 10G BASE-T STANDARD, AND TIA 568-C.2
- ALL MATERIALS COMPLY WITH ROHS STANDARD
- TEST RANGE FROM 1 TO 650 MHz
- SMALLER OD COMPARES TO ELITE 10GX CAT.6A UTP
- UL & ETL VERIFIED CAT.6A
- OVERALL SHIELDED CORE



CONSTRUCTION RISER/PLENUM

Conductor

- 23 AWG Solid bare copper

Insulation

- Non-Plenum: Polyolefin(PE)
- Plenum: Fluoropolymer(FEP)

Color Code

- Pair1: Blue-White/ Blue
- Pair2: Orange-White/ Orange
- Pair3: Green-White/ Green
- Pair4: Brown-White/ Brown

X-Filler

- Non-Plenum: Polyolefin(PE)
- Plenum: Fluoropolymer(FEP)

Shield

- Aluminum/PET

Drain Wire

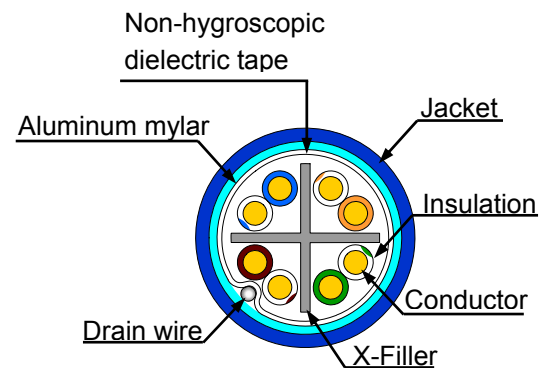
- Tinned copper

Jacket

- Low-smoke, flame-retardant LSOH/PVC

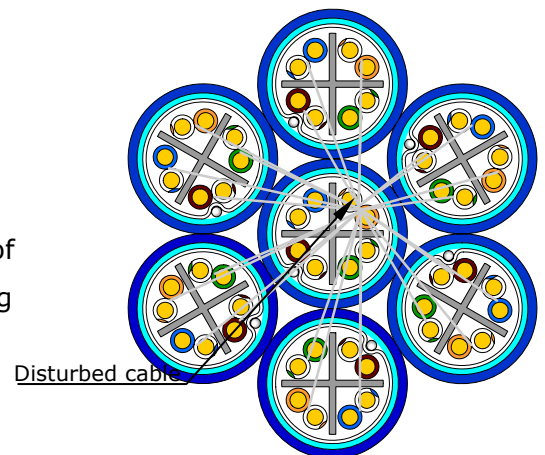
PACKAGING

- 1,000 FEET(305M) REELS



6-around-1 cable test configuration:

This test is for measuring alien crosstalk loss between pairs of adjacent cables in a 7-cable assembly consisting of the same design. Measure the ANEXT loss and AFEXT loss between each of the pairs of the disturbed cable and each pair of every disturbing cable. This will result in 96 measurements each for ANEXT loss and AFEXT loss. Great performance with headroom up to 4dB.



ELECTRICAL PROPERTIES FOR BOTH RISER AND PLENUM

CONDUCTOR DCR: $9.38 \Omega / 100M @ 20^{\circ}C$
DCR UNBALANCE: 3%MAX
CAPACITANCE UNBALANCE
PAIR/GROUND: 330PF/100M MAX
CHARACTERISTIC
IMPEDANCE: $100 \Omega \pm 10\% (10-550MHz)$
INPUT $100 \Omega \pm 12\% (1-100MHz)$
IMPEDANCE: $100 \Omega \pm 15\% (>100-350MHz)$
 $100 \Omega \pm 22\% (>350MHz)$
RETURN LOSS: $20+7\log(f)$ dB MIN (1-10MHz)
 27 dB MIN(10-20MHz)
 $27-7\log(f/20)$ dB MIN (>20MHz)
INSERTION LOSS: $1.8\sqrt{f}+0.01f+0.2/\sqrt{f}$ dB/100M MAX
(ATTENUATION)
NEAR END(NEXT)
CROSSTALK: $44.3 - 15 \log(f/100)$ dB/100M MIN

POWER SUM NEAR END
CROSSTALK (PS NEXT): $42.3- 15\log(f/100)$ dB/100M MIN
ATTENUATION TO CROSSTALK
RATIO FAR END(ACRF): $31.8- 20\log(f/100)$ dB/100M MIN
POWER SUM ATTENUATION TO CROSSTALK
RATIO FAR END (PS ACRF): $28.8- 20 \log(f/100)$ dB/100M MIN
POWER SUM ALIEN NEAR END
CROSSTALK (PS ANEXT): $66.5- 15 \log(f/100)$ dB/100M MIN
 67 dB MIN
POWER SUM ALIEN ATTENUATION TO CROSSTALK RATIO
FAR END (PS AACRF): $42.2- 20 \log(f/100)$ dB/100M MIN
 67 dB MIN
PROPAGATION DELAY: $534 + 36/\sqrt{f}$ ns/100m MAX
PROPAGATION DELAY SKEW: 25 ns/100m MAX
NOMINAL VELOCITY OF 70% PLENUM
PROPAGATION (NVP): 66% NON-PENUM
 NOTE: Attenuation To Crosstalk Ratio Far End (ACRF) was previously referred to as Equal Level Far End Crosstalk (ELFEXT) WHERE f = FREQUENCY IN MHz from 1 to 500 MHz

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	INS LOSS (dB/100m)	RETURN LOSS (dB/100m)	NEXT (dB/100m)	PS NEXT (dB/100m)	ACRF (dB/100m)	PS ACRF (dB/100m)	PROP DELAY (dB/100m)	ALIEN CROSSTALK	
								PS ANEXT (dB/100m)	PS AACRF (dB/100m)
	max	min	Min	min	min	min	max	min	min
1.0	2.0	20.0	74.3	72.3	71.8	68.8	570.0	71.0	71.0
4.0	3.7	24.2	65.3	63.3	59.8	56.8	552.0	71.0	70.2
8.0	5.2	26.3	59.8	58.8	53.7	50.7	546.7	71.0	64.1
10.0	5.9	27.0	59.3	57.3	51.8	48.8	545.4	71.0	62.2
16.0	7.4	27.0	56.2	54.2	47.7	44.7	543.0	71.0	58.1
20.0	8.3	27.0	54.8	52.8	45.8	42.8	542.0	71.0	56.2
25.0	9.3	26.3	53.3	51.3	43.8	40.8	541.2	71.0	54.2
31.25	10.4	25.6	51.9	49.9	41.9	38.9	540.4	71.0	52.3
62.5	14.9	23.5	47.4	45.4	35.9	32.9	538.6	69.6	46.3
100.0	19.0	22.1	44.3	42.3	31.8	28.8	537.6	66.5	42.2
155.0	24.0	20.8	41.4	39.4	28.0	25.0	536.9	63.6	38.4
200.0	27.5	20.0	39.8	37.8	25.8	22.8	536.5	62.0	36.2
250.0	31.0	19.3	38.3	36.3	23.8	20.8	536.3	60.5	34.2
300.0	34.2	18.8	37.1	35.3	22.3	19.3	536.1	59.3	32.7
350.0	37.2	18.3	36.1	34.1	20.9	17.9	535.9	58.3	31.3
400.0	40.0	17.9	35.3	33.3	19.8	16.8	535.8	57.5	30.2
500.0	45.3	17.5	33.8	31.8	17.8	14.8	535.6	56.0	28.2
550.0	47.7	17.2	33.2	31.2	-	-	-	-	-
600.0	50.1	16.9	32.6	30.6	-	-	-	-	-
650.0	52.4	16.7	32.1	30.1	-	-	-	-	-