

F/UTP Shielded CAT.6A LSZH 23AWG Twisted Pair Installation Cable



Standard

- IEC/ISO 61156-5
- ANSI/TIA568C.2
- ISO/IEC 11801

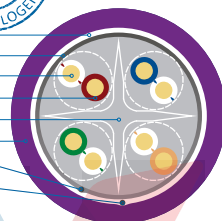
Application

- Suitable for structured premises cabling.
- For transmission of digital and analogue voice and data signals.
- Especially suitable for all Class EA applications.
- ISDN, Ethernet 10 Base-T, Fast Ethernet 100 Base-T, Gigabit Ethernet 1000Base-T, 10G Base-T. (IEEE 802.3).
- Token Ring 4/16Mbit/s, TP-PMD/TP/DDI 125Mbit/s, ATM 155Mbit/s. (IEEE 802.5).

Electrical Characteristics

- Bandwidth: 500MHz
- Transmission Speed: 10GBPS
- Shielded: Wire and aluminium
- Jacket: LSZH Low smoke zero halogen
- Impedance: 4 - 100MHz 100 ± 15 (ohms).
100 - 200MHz 100 ± 22 (ohms).
200 - 500MHz 100 ± 32 (ohms).
- Max. Conductor DC Resistance 20°C : 8.4 (ohms/100m).
- Resistance unbalance (%): max 2.5.
- Pair-to-Ground Capacitance Unbalance 330 (pF/100m).
- Transfer Impedance: Max 10 ohms/m @ 100MHz.
- Installation temperature: $0 \sim 50^\circ\text{C}$.
- Operation temperature: $-20 \sim 60^\circ\text{C}$.

- Aluminum Foil
- Inner Jacket
- Conductor
- HDPE Insulation
- Cross Filler
- Jacket
- Drain Wire
- Rip Cord



Conductor

Conductor	Solid Bare Copper 23AWG
Insulation	HDPE
Total number of insulated conductors	8, twisted in 4 pairs
Color code	blue x white, orange x white, green x white, brown x white
Individual pair shield	None
Overall shield	Aluminum foil, providing 100% coverage, foil face out.
Drain wire	Tinned copper

Order information

Item	Outer Jacket	Overall diameter(mm)
D305-P	CMX	7.6 ± 0.3
D305-C	CM	7.6 ± 0.3
D305-R	CMR	7.6 ± 0.3
D305-L	LSZH	7.6 ± 0.3
D305-E	LDPE	7.6 ± 0.3

Nominal Transmission Characteristics

Frequency	RL (min)	IL(max)	DOP(max)	Delay Skew (max)	NEXT (min)	PSNEXT (min)	ACR-F (min)	PSACR-F (min)
(MHz)	(dB)	(dB/100m)	(ns/100m)	(ns/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)
1	20.0	2.1	570	45	74.3	72.3	67.8	64.8
4	23.0	3.8	552	45	65.3	63.3	55.8	52.8
10	25.0	6.0	545.4	45	59.3	57.3	47.8	44.8
16	25.0	7.6	543	45	56.2	54.2	43.7	40.7
20	25.0	8.5	542.1	45	54.8	52.8	41.8	38.8
31.25	25.0	10.7	540.4	45	51.9	49.9	37.9	34.9
62.5	21.5	15.4	538.6	45	47.4	45.4	31.9	28.9
100	20.1	19.8	537.6	45	44.3	42.3	27.8	24.8
200	18.0	29.0	536.1	45	39.8	37.8	21.8	18.8
300	17.3	36.4	536.1	45	37.1	35.1	18.3	15.3
400	17.3	43.0	535.8	45	35.3	33.3	15.8	12.8
500	17.3	45.3	535.6	45	33.8	31.8	13.8	10.8

Note: The above transmission performance for the 100M, $20 \pm 2^\circ\text{C}$ under the conditions tested.

TEST REPORT



Cable ID: F/UTPCAT 6A-01

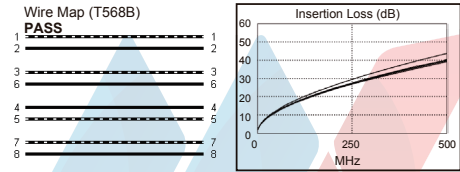
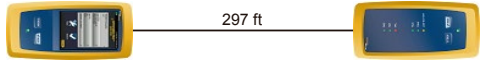
Date / Time: 01/15/2020 02:16:03 PM
 Headroom 3.8 dB (NEXT 12-36)
 Test Limit: TIA Cat 6A Perm. Link
 Cable Type: Cat 6A U/UTP
 NVP: 65.0%

Software Version: V6.0 Build 6
 Limits Version: V7.0
 Calibration Date:
 Main (Module): 01/15/2020
 Remote (Module): 01/15/2020

Test Summary: PASS

Model: DSX-5000
 Main S/N: 2420893
 Remote S/N: 2420426
 Main Adapter: DSX-PLA004
 Remote Adapter: DSX-PLA004

Length (ft), Limit 295	[Pair 78]	297
Prop. Delay (ns), Limit 498	[Pair 45]	490
Delay Skew (ns), Limit 44	[Pair 45]	26
Resistance (ohms)	[Pair 45]	15.4
Insertion Loss Margin (dB)	[Pair 45]	3.4
Frequency (MHz)	[Pair 45]	500.0
Limit (dB)	[Pair 45]	43.8



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-36	12-36	12-36	12-36
NEXT (dB)	4.3	3.8	4.9	3.8
Freq. (MHz)	111.5	443.0	500.0	443.0
Limit (dB)	41.1	28.4	26.7	28.4
Worst Pair	36	36	36	36
PS NEXT (dB)	5.5	4.2	5.5	4.2
Freq. (MHz)	499.0	443.0	499.0	443.0
Limit (dB)	23.8	25.6	23.8	25.6

	MAIN		SR	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12-45	12-45	12-45	12-45
ACR-F (dB)	11.9	11.7	14.0	13.0
Freq. (MHz)	146.5	145.0	469.0	406.0
Limit (dB)	20.9	21.0	10.8	12.0
Worst Pair	12	45	36	36
PS ACR-F (dB)	12.8	12.6	14.8	14.1
Freq. (MHz)	130.5	132.0	500.0	497.0
Limit (dB)	18.9	18.8	7.2	7.3

	MAIN		SR	
	MAIN	SR	MAIN	SR
N/A				
Worst Pair	36-78	12-36	12-36	36-45
ACR-N (dB)	9.4	9.1	19.9	20.0
Freq. (MHz)	27.5	15.6	500.0	498.0
Limit (dB)	41.7	47.9	-17.1	-16.9
Worst Pair	36	36	36	36
PS ACR-N (dB)	10.0	9.8	20.6	21.1
Freq. (MHz)	11.1	15.6	500.0	497.0
Limit (dB)	48.9	45.5	-20.0	-19.7

	MAIN		SR	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	45	45	45	45
RL (dB)	6.6	5.2	7.6	9.0
Freq. (MHz)	76.8	76.5	495.0	485.0
Limit (dB)	15.1	15.2	8.0	8.0

Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	10GBASE-T	ATM-25
ATM-51	ATM-155	100VG-AnyLan
TR-4	TR-16 Active	TR-16 Passive

