

PowerCat 6A U/FTP LS0H Cable Dca-s1,d2,a1 >

Molex PowerCat 6A Shielded Cable is a key component of the PowerCat 6A end-to-end solution.

Molex PowerCat 6A U/FTP LS0H Cable is specifically designed to support high speed data network applications such as 10-Gigabit Ethernet (10GBASE-T). The cable is constructed of four screened pairs, with a drain wire and enclosed in a Dca-s1,d2,a1 reaction to fire sheath, compliant with the EU and GB Construction Product Regulation.

The cable minimizes alien crosstalk, provides excellent signal isolation, and provides superior electromagnetic interference (EMI) protection.

Molex recommends that the full range of PowerCat 6A Shielded products be used in a system to maximize cabling performance. The system is compliant with ISO/IEC 11801:2017 and ANSI/TIA-568.2-D for the support of 10GBASE-T.



FEATURES AND ADVANTAGES

Outstanding signal isolation

Enhanced performance 4 pair U/FTP LS0H cable

Resistant to alien crosstalk

Color coded for ease of termination

Reaction to Fire Euroclass: Dca-s1,d2,a1

SPECIFICATIONS

Reference information

Commercial Standards:

ISO/IEC 11801:2017 Class EA
ANSI/TIA-568.2-D Category 6A

Reaction to Fire:

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
EN 60332-1-2
EN 50399
EN 60754-2
EN 13501-6
Reaction to Fire classification: Dca-s1,d2,a1

Applications:

Category 6A U/FTP Cable is intended for high-speed data applications up to 500MHz including:

IEEE 802.3 10GBASE-T 10Gb/s
IEEE 802.3 1000BASE-T 1Gb/s
TIA/EIA-854 1000BASE-TX 1Gb/s
ATM 155Mb/s 155Mb/s
PoE IEEE 802.3

Mechanical:

Conductor Size: 23AWG
Primary Insulation: Polyolefin
Screen material: Laminated Al-Mylar

Sheath Type: LS0H

Nominal OD: 6.9 +/- 0.5mm nom.

NVP: 78%

Screen: Each pair enclosed in laminated aluminum foil

Drain Wire: Tin-coated copper

Tensile Strength after aging (Mpa) > 0.8

Bend radius: 4 x OD min

Operating Temperature:

Storage: -10°C to +50°C

Operation: -20°C to +75°C

Sheath Color: Violet RAL 4005

www.molex.com/products/copper/cat6a/

PowerCat 6A U/FTP LSOH Cable Dca-s1,d2,a1

SPECIFICATIONS (CONTINUED)

Electrical Characteristics @ 20°C

Capacitance unbalanced-to ground (pf/km) max 1600

DC Resistance: 93.8 Ω /Km max.

Propagation Delay Skew:

<45 nS/100m

Impedance: Ω @ 1-250 0MHz:
100+/- 15

Impedance: Ω @ 250-500 0MHz:
100+/- 22

Voltage Rating: 72V dc maximum

Resistance Unbalance: 2% max.

Weight per 500m reel: 26.45kg nom
RoHS compliant

TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

Frequency MHz	RL \geq dB	ATT \geq dB	NEXT \geq dB	DELAY \leq ns	PSNEXT \geq dB	ELFEXT \geq dB	PSELFEXT \geq dB
1	20.00	-	74.30	570.00	72.3	67.8	64.8
4	23.00	3.80	65.30	552.00	63.3	55.8	52.8
8	24.50	5.30	60.80	546.70	58.8	49.7	46.7
10	25.00	5.90	59.30	545.40	57.3	47.8	44.8
16	25.00	7.50	56.20	543.00	54.2	43.7	40.7
20	25.00	8.40	54.80	542.10	52.8	41.8	38.8
25	24.30	9.40	53.30	541.20	51.3	39.8	36.8
31.25	23.60	10.50	51.90	540.40	49.9	37.9	34.9
62.5	21.50	15.00	47.40	538.60	45.4	31.9	28.9
100	20.10	19.10	44.30	537.60	42.3	27.8	24.8
200	18.00	27.60	39.80	536.50	37.8	21.8	18.8
250	17.30	31.10	38.30	536.30	36.3	19.8	16.8
300	16.80	34.30	37.10	536.10	35.1	18.3	15.3
500	15.2	45.3	33.8	536	31.8	13.8	10.8

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-0322L-VI	183020033	PowerCat 6A U/FTP LSOH Cable Dca-s1,d2,a1 Violet 500m reel

www.molex.com/products/copper/cat6a/