

Features and Benefits

C7 S/FTP Cable is a complementary product for shielded PowerCat 6A system.

Category 7 S/FTP cable is specifically designed to support high speed data network applications. The cable is constructed of 4 screened pairs and a tin/copper braid. This cable minimises alien crosstalk, provides excellent signal isolation and provides superior electromagnetic interference (EMI) protection.

- Transmission performance C7 in a 1-600MHz range as per IEC 61156-5 (specified in ISO/IEC 11801 2nd edition, C6A in 1-500Mhz range as per ISO/IEC11801 Amd 2) and is tested in 1.2GHz range for reference.
- Provides significant margins for NEXT, PowerSum NEXT, PowerSum ELFEXT
- Alien NEXT is significantly reduced so it can be used for 10G Application
- Low outside diameter, high flexibility
- Colour code for ease of termination
- Reaction to Fire Euroclass: Dca-s1,d1,a1

Commercial Standards

IEC 61156-5 (specified in ISO/IEC 11801 2nd edition
ISO/IEC 11801 Amd 2)
RoHS compliant

Fire Propagation Tests

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass Dca-s1a,d1,a1
DoP No: MLXCES-2017-C-013 located on web
<http://www.molexces.co.uk/about-us/our-compliance/cpr/dop-certificates/>

Technical Information

Mechanical Characteristics

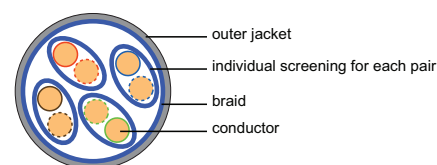
Conductor size [mm]: 23 AWG
(0.57mm)
Insulated conductor diameter [mm]:
1.0 nom OD
Pair number: 4
Outside cable diameter [mm]: 7.0 nom.
Individual pair shield:
Aluminium foil, providing 100% coverage, foil face out
Drain Wire: None
Overall shield: Tinned copper braid
Temperature range
during installation: 0°C to +50°C
during operation: -20°C to +60°C
during storage: -20°C to +75°C
Acceptable bend radius
during installation: 8 x cable size
during operation: 4 x cable size
Pulling force: 100N max
Sheath: LS0H
Sheath colour LS0H: Violet RAL4005
Shipping weight : 58kg
Cable length tolerance: +/- 5%

Maximum Pulling Strength: 150N

Electrical/Optical Characteristics

Mean Impedance: 100±5 Ohm @
1-1200 MHz
Vp 75-77% nom.
Capacitance: 40 pF/m nom @ 1kHz
Capacitance unbalance to ground:
1.6 pF/m max.
@ 1 kHz
Insulation Resistance: 0.5 GOhm
km min.
DC Resistance: 77 Ohm/km max.
(2% max. resistance unbalance).
DC Loop Resistance: 154 Ohm/km
max. (2% max. resistance unbalance)
Coupling attenuation: IEC 61156-5
TYPE I
Transfer Impedance: IEC 61156-5
Grade 1
Voltage rating: 72Vdc max.
Phase delay: 534+36/f^{1/2} nS/100m
max. @ f=1-1200 MHz
Delay Skew: 15 nS/100m max.

S/FTP C7+ Cable



MOLEX CONNECTED ENTERPRISE SOLUTIONS

Americas
Tel: 630 969 4550
www.molexces.com

EMEA
Tel: 44 (0)2392 205800
www.molexces.co.uk

APAC
Tel: 61 3 9971 7111
www.molexces.com

FEATURES AND SPECIFICATIONS

molex® Category 7 S/FTP Cable

Technical Information Electrical/Optical Characteristics

Transmission Parameters

Transmission Properties @ 20C - Conforming to IEC 61156-5 Category 7																
FREQ	Insertion Loss		NEXT		PS NEXT		ELFEXT		PS ELFEXT		RL		TCL	EL-TCTL	PS ANEXT	PS AFEXT
MHz	Db/100M		dB		dB		dB/100m		dB/100m		dB		dB	dB	dB	dB
	Max	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Min	Min	Min
1	2.06	1.8	78.0	100	75.0	97	78.0	105	75.0	103	20.0	23	40.0	35.0	67.0	67.0
10	5.86	5.4	78.0	100	75.0	97	74.0	85	71.0	83	25.0	30	40.0	15.0	67.0	67.0
25	9.29	8.7	78.0	100	75.0	97	66.0	77	63.0	75	24.3	30	36.0	7.0	67.0	65.2
31.25	10.41	9.6	78.0	100	75.0	97	64.1	75	61.1	73	23.6	28	35.1	5.1	67.0	63.3
62.5	14.88	13.7	75.5	100	72.5	97	58.0	69	55.1	67	21.5	28	32.0	NS	67.0	57.3
100	19.02	17.4	72.4	100	69.4	97	54.0	65	51.0	63	20.1	25	30.0	NS	67.0	53.2
250	30.97	28.1	66.4	90	63.4	87	46.0	57	43.0	55	17.3	25	26.0	NS	67.0	53.2
300	34.19	30.9	65.2	89	62.2	86	44.5	55	41.5	53	17.3	25	NS	NS	67.0	45.2
400	40.01	35.0	63.4	88	60.4	85	42.0	53	39.0	51	17.3	23	NS	NS	67.0	41.2
500	45.26	40.0	61.9	86	58.9	83	40.0	50	37.0	48	17.3	23	NS	NS	67.0	39.2
600	50.10	44.8	60.7	85	57.7	82	38.4	49	35.4	47	17.3	23	NS	NS	65.8	37.6
700	NS	48.0	NS	84	NS	81	NS	48	NS	46	NS	23	NS	NS	64.8	36.3
800	NS	51.0	NS	83	NS	80	NS	47	NS	45	NS	23	NS	NS	64.0	35.1
1000	NS	58.4	NS	82	NS	79	NS	45	NS	43	NS	20	NS	NS	62.5	33.2
1200	NS	68.0	NS	70	NS	69	NS	40	NS	38	NS	18	NS	NS	NS	NS

Values above 600MHz are for reference only

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-00358	183530002	Category 7 S/FTP LS0H Cable Dca-s1a,d1,a1 violet 1000m reel

MOLEX CONNECTED ENTERPRISE SOLUTIONS

Americas
Tel: 630 969 4550
www.molexces.com

EMEA
Tel: 44 (0)2392 205800
www.molexces.co.uk

APAC
Tel: 61 3 9971 7111
www.molexces.com