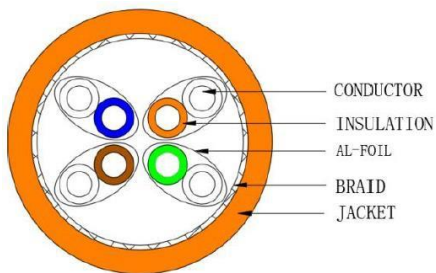


Data Sheet

Cat7a S/FTP Installation Solid Cable 23AWG BC LSZH 1300 MHz, CPR, Orange



Drawing:



BN	Length (m)	Cable Color
2114025	50	Orange
2752206	100	Orange
2752207	305	Orange

Application

10 BASE-T (IEEE 802.3)
4/16 Mbps TOKEN RING (IEEE 802.5)
100 BASE-VG-AnyLAN
100 Mbps TP-PMD (ANSI X3T9.5)
100 BASE-T (IEEE 802.3)
55/155 Mbps ATM
1000 BASE-T (Gigabit Ethernet)
1.2 Gbps ATM
10G BASE-T

Data Sheet

Reference Standard

ISO/IEC 11801, EN 50173, ANSI/TIA-568.2-D IEC 61156-5

EN 50288-9-1

EN 50575

EN 50399

EN 60332-1-2

EN 61034-2

EN 60754-2

CPR-Dca s2, d1, a1 Verified

ROHS 2.0 & REACH Compliant

3P Certified

Technical Data

Structure	Construction	S/FTP
	Number of Pairs	4 Pairs
Conductor	AWG	23
	Conductor material	99.99% oxygen-free copper
	Conductor dimension	1/0.585±0.005 mm
Insulation	Insulation material	FMPE
	Insulation dimension	1.38±0.05 mm
	Number color (Ring or stripe or pure marking)	1. White & Blue 2. White & Orange 3. White & Green 4. White & Brown
Cabling	Twisting lay length	≤30 mm
	Cabling lay length	≤200 mm
Filler	Filler material	N/A
Binder	Binder material	N/A
Shield	Individual shield & material	AL-Foil
	Primary overall shield & material	AL-MG braid
	Secondary overall shield & material	N/A
	Shield coverage approx.	30%
	Drain wire	N/A

Data Sheet

Outer Jacket	Jacket material	LSZH
	Jacket thickness nominal	0.50 mm
	Overall nominal dimension	7.40±0.30 mm
	Jacket rip cord	None
Mechanical Characteristics	Operating temperature range	-20 °C ~ +75 °C
	Installation temperature range	0 °C ~ +50 °C
	Bulk cable weight approx.	-
	Max. recommended pulling tension	110 N
	Min. bend radius (install)	8 x O.D.
	Outer jacket tensile strength	≥9.0 MPa
	Outer jacket elongation	≥100%
	Outer jacket aging condition	100 °C x 168 hrs
	After aging, tensile strength	≥70% of Unaging
	After aging, elongation	≥50% of Unaging
	Cold bend (static)	No Crack (@ -20 °C x 4 hrs)
Electrical Characteristics	Nom. mutual capacitance	≤5.6 nF/100 m (@1 kHz)
	Pair to ground capacitance unbalance	≤160 pF/100 m
	Nominal velocity of propagation	72%
	Max. delay skew	25 ns/100 m
	Max. conductor DC resistance	9.5 Ω/100 m (@2 °C)
	Max. conductor resistance unbalance	2% (@ 20 °C) within a pair
	Min. insulation resistance	5000 MΩ.km
	Max. operating voltage - UL	300 V
	Dielectric strength	2.5 kV DC for 2 s
	(Conductor/conductor, conductor/screen)	1.0 kV DC for 1 min

Data Sheet

Electrical Characteristics

Frequency	Attenuation	NEXT	PSNEXT	Return loss	ELFEXT	PSELFEXT
(MHz)	(dB/ 100m)	(dB)	(dB)	(dB)	(dB)	(dB)
1	2.1	78.0	75.0	20.0	78.0	75.0
4	3.7	78.0	75.0	23.0	78.0	75.0
10	5.8	78.0	75.0	25.0	75.3	72.3
16	7.3	78.0	75.0	25.0	71.2	68.2
20	8.2	78.0	75.0	25.0	69.3	66.3
31.25	10.3	78.0	75.0	23.6	65.4	62.4
62.5	14.6	78.0	75.0	21.5	59.4	56.4
100	18.5	75.4	72.4	20.1	55.3	52.3
250	29.7	69.4	66.4	17.3	47.3	44.3
300	32.7	68.2	65.2	17.3	45.8	42.8
400	38.0	66.4	63.4	17.3	43.3	40.3
550	45.0	64.3	61.3	17.3	40.5	37.5
600	47.1	63.7	60.7	17.3	39.7	36.7
650	49.2	63.2	60.2	17.0	39.0	36.0
750	53.1	62.3	59.3	16.3	37.8	34.8
800	54.9	61.9	58.9	16.1	37.2	34.2
900	58.5	61.1	58.1	15.5	36.2	33.2
1000	61.9	60.4	57.4	15.1	35.3	32.3
1200	68.4	59.2	56.2	14.3	33.7	30.7
1300	71.4	58.7	55.7	13.9	33.0	30.0

Remark:

The cable performance between 1000 MHz and 1300 MHz is achieved by design only and it is therefore not necessary to test for this performance above 1000 MHz.