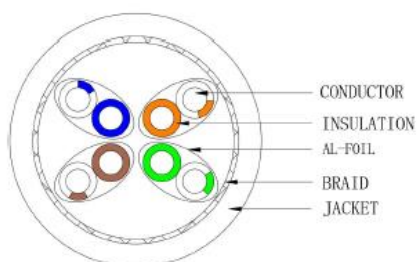


Data Sheet

Cat7 S/FTP Installation Solid Cable BC 23AWG/1 LSZH 1000 MHz, CPR, Eca, Orange



Drawing:



BN	Length (m)	Cable Color
1973211	50	Orange
2100161	100	Orange
2100215	305	Orange
2101005	500	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

Reference Standard

ISO/ IEC 11801, EN 50173,
ANSI/TIA-568.2-D
IEC 61156-5
EN 50288-4-1
EN 50575
EN 60332-1-2
CPR-Eca Verified
ROHS 2.0 & REACH Compliant

Data Sheet

Technical Data

Structure	Construction	S/FTP
	Number of Pairs	4 Pairs
Conductor	AWG	23
	Conductor material	99.99% oxygen-free copper
	Conductor dimension	1/0.55±0.008 mm
Insulation	Insulation material	FMPE
	Insulation dimension	1.35±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.	≥25%
	Drain wire	N/A

Data Sheet

Outer Jacket	Jacket material	LSZH
	Jacket thickness nominal	0.50 mm
	Overall nominal dimension	7.30±0.30 mm
	Jacket rip cord	None
Mechanical Characteristics	Operating temperature range	-20 °C ~ +75 °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 Unageing
	After aging, elongation	≥50% of Unageing
	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)
4	3.75	78	75	23	82	79
8	5.24	78	75	24.5	75.9	72.9
10	5.86	78	75	25	74	71
16	7.41	78	75	25	69.9	66.9
20	8.29	78	75	25	68	65
25	9.29	78	75	24.3	66	63
31.25	10.41	78	75	23.6	64.1	61.1
62.5	14.88	75.5	72.5	21.5	58.1	55.1
100	19.02	72.4	69.4	20.1	54	51
200	30.97	66.4	63.4	17.3	46	43
250	34.19	65.2	62.2	17.3	44.5	41.5
350	40.04	63.4	60.4	17.3	42	39
500	45.26	61.9	58.9	17.3	40	37
600	50.1	60.7	57.7	17.3	38.4	35.4
1000	66.93	57.4	54.4	17.3	34	31

Remark: The cable performance between 600 MHz and 1000 MHz is achieved by design only and it is therefore not necessary to test for this performance above 600 Hz