

ADTRONICS® AD-C4C6ASF-550 MHz

Ethernet Cable CAT6A S/FTP 4P,LSZH, 550MHz AWG23



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10G-Base-T;

IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards

Class E compliant ANSI/TIA/EIA

IEC 61156-5 / EN 50288-5-1 / EN 50174 / EN 50173-1

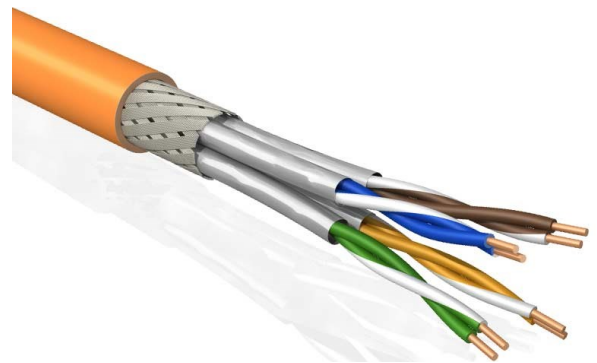
ISO/IEC 11801:2011 / EIA/TIA 568-A/B2.10/C2/2-D

RoHS 2002/95/EC

Fire Rating

PVC: IEC 60332-1;

LSHF : IEC 60332-1; IEC 60754-2; IEC 61034



Construction

Conductor	Bare copper wire \varnothing 0.55 mm (AWG23)
Insulation	Foamskin Polyethylene, \varnothing 1.4 mm
Stranding	2 cores to the pair
Pair screen	Al-laminated plastic foil around each pair
Overall screen	Copper braid, tinned outer \varnothing 7.2 mm
Cable lay up	4 pairs to the core
Sheath	Flame retardant and halogen free LSHF
electromagnetic compatibility	EMC

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Mechanical properties

Minimum bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	during operation	-20°C up to + 60°C
	during installation	0°C up to + 50°C
Maximum tensile load, installation	During installation(4P/2x4P)	100N/200N
	Installed	No load

Electrical properties at 20°C± 5°C

loop resistance		≤ 145 Ω /km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 5000 MΩ *km
Mutual Capacitance	at 800 Hz	Nom. 44 nF/km
Capacitance unbalance	(pair to ground)	≤ 800 pF/km
Mean impedance	100 MHz	100 ± 5 Ω
Nominal velocity of propagation		0,75c
Propagation delay		≤ 500 ns/100m
Delay skew		≤ 12 ns/100m
Transfer impedance	at 1 MHz	≤ 10 MΩ /m
	at 10 MHz	≤ 10 MΩ /m
	at 30 MHz	≤ 30 MΩ /m
	at 100 MHz	≤ 60 MΩ /m

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Electrical data (nominal) acc. to Cat.6A (at 20°C)

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (dB/100m)	Return loss (dB)
1.0	1.8	100	97	98	95	105	105	-
4.0	3.4	100	97	97	94	105	102	27
10.0	5.4	100	97	95	92	97	94	30
16.0	6.8	100	97	93	90	93	90	30
20.0	7.7	100	97	92	89	91	88	30
31.2	9.6	100	97	90	87	87	84	30
62.5	13.7	100	97	86	83	81	78	30
100.0	17.4	100	97	83	80	77	74	30
125.0	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175.0	23.3	93	90	70	67	72	69	25
200.0	25.0	92	89	67	64	71	68	25
250.0	28.1	90	87	62	59	69	66	24
300.0	30.9	89	86	58	55	67	64	24
400.0	38.3	87	84	48	45	64	61	23
500.0	43.0	86	83	43	40	61	58	22
550.0	48.8	85	82	40	37	61	58	22

References

References	Description
AD-C4C6ASFPVC	Cable Cat. 6A S/FTP PVC, 550 MHz AWG 23
AD-C4C6ASFLSZH	Cable Cat. 6A S/FTP LSZH, 550 MHz AWG 23