

Zone trunk cable /jack-jack/, STP 6x4x2xAWG26, Category 6_A, 500 MHz, LSOH



P/N: KE-ZTC6AHD-xxx

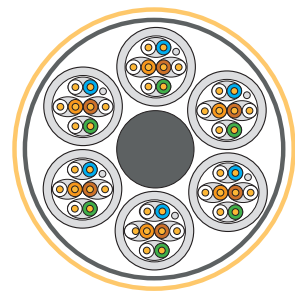
10
Gigabit

Cat. 6_A
interoperable

500
MHz

LSOH

HD
HIGH DENSITY



Features

- allows to easily and quickly implement any necessary changes in a data center without a need to outsource other installation capacity
- simplifies and streamlines a management of cable routes
- enables transmission of all high-speed protocols including 10GBASE-T
- cable characterized up to 500 MHz

Application

- tertiary (Horizontal), zone cabling
- IEEE 802.3: 10BASE-T; 100BASE-TX; 1000BASE-T; 10GBASE-T
- IEEE 802.5: 16 MB; ISDN; FDDI; ATM
- high bandwidth digital applications with low BER

Mechanical properties of keystone jack HD

Suitable for installing on cables	with solid wires	from 0,51 to 0,64 mm (od AWG24 do AWG22)
	with stranded wires (special plastic insert)	from AWG27/7 to AWG26/7
Required installation depth		sockets with angled faceplates 10 - 35 mm sockets with straight faceplates 35 mm
Insertion/extraction cycles		min. 750
Temperature range	operation	-40°C to +70°C
IDC reterminations		min. 20
Contact pin material		phosphor-bronze alloy coated with 50 μ of gold
IDC contacts material		high strength phosphor-bronze alloy
IDC contacts plating		100 micron tin alloy

Electrical properties of keystone jack HD at 20°C

Current rating	1,25 A max
Contact resistance of spring	20 mΩ max
Contact resistance of IDC	2,5 mΩ max
Dielectric strength	1000V DC/AC 1 min. contact/contact
	1500V DC/AC 1 min. contact/panel
Insulation resistance	500 MΩ

Transmission properties of keystone jack HD at 20°C

f (MHz)	Attenuation (dB max)	NEXT (dB min)	PS-NEXT (dB min)	FEXT (dB min)	Return loss (dB)	TLC (dB min)	PS-ANEXT (dB min)	PS-AFEXT (dB min)
1,0	0,1	75,0	72,0	75,0	30,0	40,0	72,0	72,0
4,0	0,1	75,0	72,0	71,1	30,0	40,0	72,0	72,0
10,0	0,1	74,0	70,0	63,1	30,0	40,0	72,0	72,0
16,0	0,1	69,9	65,9	59,0	30,0	40,0	72,0	72,0
20,0	0,1	68,0	64,0	57,1	30,0	40,0	72,0	72,0
31,2	0,1	64,1	60,1	53,2	30,0	38,1	72,0	72,0
62,5	0,16	58,1	54,1	47,2	30,0	32,1	72,0	71,1
100,0	0,2	54,0	50,0	43,1	28,0	28,0	70,5	67,0
155,5	0,24	50,2	46,2	39,3	25,0	25,0	66,7	63,2
200,0	0,28	48,0	44,0	37,1	22,0	22,0	64,5	61,0
250,0	0,32	46,0	42,0	35,1	20,0	20,0	62,5	59,0
300,0	0,35	43,7	39,7	33,6	18,5	18,5	61,0	57,5
400,0	0,4	39,9	35,9	31,1	16,0	16,0	58,5	55,0
500,0	0,45	37,0	33,0	29,1	14,0	14,0	56,5	53,0

Construction of trunk cable

Cable core	STP 6x4x2xAWG26
Outer cable diameter	21 mm
Sheath	LSOH, orange RAL 2003

Construction of cable

Conductor	bare copper wire, AWG26
Insulation	foamskin polyethylene, Ø 1,0 mm
Twisting	2 cores to the pair
Pair screen	AL/PET foil
Cable lay up	4 pairs to the core
Outer cable diameter	5,5 mm
Sheath	LSOH, grey RAL 7035

Mechanical properties of trunk cable

Min. bending radius	installation	168 mm
	operation	84 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +60 °C
Max. tensile load		100 N (10 kg)
Cable weight (netto)		56 kg / 100 m

Electrical properties of the individual wires at 20°C

Loop resistance	—	≤ 163 Ω/km
Resistance unbalance	—	≤ 2%
Insulation resistance	(500V)	≥ 5000 MΩ x km
Capacity	at 800 Hz	nom. 43 nF/km
Capacity unbalance	(pair/ground)	≤ 800 pF/km
Characteristic impedance	1 - 100 MHz	100 ± 15 Ω
	100 - 250 MHz	100 ± 20 Ω
	250 - 500 MHz	100 ± 25 Ω
Nominal velocity of propagation (NVP)	—	cca 70%
Propagation delay	Nominal	≤ 500 ns/100 m
Delay skew	Nominal	≤ 20 ns/100 m
Test voltage	(DC, 1 min.) core/core; core/screen	1 000 V
Transfer impedance	at 1 MHz	≤ 50 mΩ/m
	at 10 MHz	≤ 100 mΩ/m
	at 30 MHz	≤ 200 mΩ/m
	at 100 MHz	≤ 1000 mΩ/m
Coupling attenuation	Type II (≥ 55 dB@100 MHz)	Alien crosstalk (ANEXT, AFEXT) is proven by design

Transmission properties at 20°C

f (MHz)	Attenuation (dB/55 m)	NEXT (dB min)	PS-NEXT (dB min)	ELFEXT (dB/55 m)	PS-ELFEXT (dB/55 m)	Return loss (dB)
4,0	3,8	66,3	63,3	56,0	53,0	23,0
10,0	—	60,3	57,3	48,0	45,0	25,0
16,0	7,5	57,2	54,2	43,9	40,9	25,0
31,25	10,5	52,9	49,9	38,1	35,1	23,6
62,5	15,0	48,4	45,4	32,1	29,1	21,5
100,0	19,1	45,3	42,3	28,0	25,0	20,1
250,0	31,1	39,3	36,3	20,0	17,0	17,3
500,0	45,3	34,8	31,8	14,0	11,0	17,3