

Technical Specifications

Product Line: 24-4P-P-L6

Description

4 pair 23 AWG solid, twisted, and unshielded cable NEC type CMP and CEC type CMP FT6. Third party verified to ANSI/TIA-568C Category 6 performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC articles 725 and 800.

Conductor

23 AWG
Solid annealed bare copper conductors
Diameter: 0.0226" | 0.574mm

Electrical

DC resistance: $\leq 20.12 \Omega / 1000'$ | $65.99 \Omega/KM$
DCR Unbalance: $\leq 5.0\%$
Capacitance: 14.0 pF/FT | 45.9 pF/M
Impedance: $100 \pm 15 \Omega$
Propagation Delay (Skew): 45ns/100m MAX
Velocity of Propagation: 71%
Voltage rating: 300V
Pair to ground capacitance Unbalance: $\leq 330 \text{ pF}/100M$
Maximum current: 1.4A@25°C

Insulation

Fluorinated ethylene propylene
Wall thickness: 0.008" | 0.20mm
Diameter: 0.0386" | 0.981mm

Regulatory

ANSI/TIA-568-C Category 6
NEC: CMP 75°C
CEC: CMP FT6 60°C
EU RoHS 2002/95/EC Compliant

Color Code

Pair 1: Orange, White/orange stripe
Pair 2: Blue, White/blue stripe
Pair 3: Green, White/green stripe
Pair 4: Brown, White/brown stripe

Packages

Reel: 1000' | 305M
Weight: 33 Lbs/1000' | 50 Kg/KM

Assembly

Pairs twisted in varying lay lengths
Each pair in a fluoropolymer X separator interstice

Installation

Pull Tension: 25 Lbs | 111 N
Bend radius: 2.20" | 56mm unloaded
Bend radius: 4.40" | 112mm loaded
Plenum cable should be conditioned at room temperature for 24 hours prior to installation and never installed below 32°F | 0°C ambient temperature

Construct

Ripcord under jacket

Applications

Plenum LAN systems 10/100/1000BaseT
Plenum Phone, Voice, Video over IP and security video
BALUN support and media infrastructure
Infrared, audio

Shield

N/A

Performance

LAN: 300 feet
Passive Baluns up to 2500 feet

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Jacket

Plenum rated polyvinyl chloride
 Colors: Blue, White, Green, Yellow
 Wall thickness: 0.019" | 0.483mm
 Diameter: 0.220" | 5.59mm

Final Outside Diameter (inches)

0.220

Specification Revision Date:

February 24, 2006

Category 6 Performance Chart

FREQ (MHz)	Insertion Loss (dB/100m)	NEXT (dB)	PSNEXT (dB)	ACR (dB/100m)	PSACR (dB/100m)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	RL (dB)
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.
1.0	2.0	80.3	78.3	78.3	76.3	74.8	70.8	23.0
4.0	3.8	71.3	69.3	67.5	65.5	62.8	58.8	23.6
8.0	5.3	66.8	64.8	61.5	59.5	56.7	52.7	25.4
10.0	5.9	65.3	63.3	59.4	57.4	54.8	50.8	26.0
16.0	7.4	62.2	60.3	54.8	52.9	50.7	46.7	26.0
20.0	8.3	60.8	58.8	52.5	50.5	48.8	44.8	26.0
25.0	9.3	59.3	57.3	50.0	48.0	46.8	42.8	25.5
31.25	10.4	57.9	55.9	47.5	45.5	44.9	40.9	25.0
62.5	14.9	53.4	51.4	38.5	36.5	38.9	34.9	23.5
100.0	19.0	50.3	48.3	31.3	29.3	34.8	30.8	23.0
155.0	23.9	47.4	45.5	23.5	21.6	31.0	27.0	21.6
200.0	27.4	45.8	43.8	18.4	16.4	28.8	24.8	21.0
250.0	30.8	44.3	42.3	13.5	11.5	26.8	22.8	18.3
350.0	37	42.1	40.2	5.1	3.2	23.9	19.9	17.3
450.0	39.7	41.3	39.3	1.6	-0.4	22.8	18.8	16.9
550.0	47.3	39.2	37.2	-8.1	-10.1	20	16	15.9