



## Technical Specifications

**Product Line: 24-4P-L6-HT**

### Description

4 pair 23.5 AWG solid, twisted, and unshielded cable

NEC type CMR and CEC type CMR FT4. 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

Cat 6: 24 AWG

Solid annealed bare copper conductors

Diameter: 0.021" | 0.525mm

### Insulation

Thermoplastic polyolefin

Wall thickness: 0.010" | 0.25mm

Diameter: 0.041" | 1.06mm

### 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

### Assembly

Pairs twisted in varying lay lengths with co-extruded like striped conductor

Each pair run in an individual polyethylene X separator

### Construct

Ripcord under jacket

### Shield

N/A

### Jacket

Flame retardant polyvinyl chloride

Colors: Blue, White, Green, Gray

Wall thickness: 0.022" | 0.56mm

Diameter: 0.224" | 5.70mm

Specification Revision Date:

### Electrical

DC resistance:  $\leq 28.6 \Omega / 1000'$  |  $93.8 \Omega/KM$

DCR Unbalance:  $\leq 5.0\%$

Capacitance: 17.0 pF/FT | 56.0 pF/M

Impedance:  $100 \pm 15 \Omega$

Propagation Delay (Skew): 45ns/100m MAX

Velocity of Propagation: 68%

Voltage rating: 300V

Pair to ground capacitance Unbalance:  $\leq 330 \text{ pF}/100M$

Maximum current: 1.4A@25°C

### Regulatory

ANSI/TIA-568C Category 6

NEC: CM 60°C

CEC: CMG FT4 60°C

EU RoHS 2002/95/EC Compliant

### Packages

Reel: 1000' | 305M

Weight: Lbs/1000' | Kg/KM

### Installation

Pull Tension: 25 Lbs | 111 N

Bend radius: 2.24" | 57mm unloaded

Bend radius: 4.48" | 114mm loaded

### Applications

Riser LAN systems 10/100/1000BaseT

Riser Phone, Voice, Video over IP and security video

BALUN support and media infrastructure

Infrared, audio

### Performance

LAN: 300 feet

Passive Baluns up to 2500 feet

### Final Outside Diameter (inches)

0.224

May 25, 2010





**Technical Specifications**  
**Product Line: 24-4P-L6-HT**

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	74.3	72.3	72.3	70.3	67.8	64.8	20.0
4.0	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0
8.0	5.3	60.8	58.8	55.5	53.5	49.7	46.7	24.5
10.0	6.0	59.3	57.3	53.3	51.3	47.8	44.8	25.0
16.0	7.6	56.2	54.2	48.6	46.6	43.7	40.7	25.0
20.0	8.5	54.8	52.8	46.3	44.3	41.8	38.8	25.0
25.0	9.5	53.3	51.3	43.8	41.8	39.8	36.8	24.3
31.25	10.7	51.9	49.9	41.2	39.2	37.9	34.9	23.6
62.5	15.4	47.4	45.4	32.0	30.0	31.9	25.9	21.5
100.0	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.1
200.0	29.0	39.8	37.8	10.8	8.8	21.8	18.8	18.5
250.0	32.8	38.3	36.3	5.5	3.5	19.8	16.8	17.3

