

Technical Specifications

Product Line: **24-4P-L6A**

Description

4 pair 23 AWG solid, twisted, and unshielded cable NEC type CMR and CEC type CMR FT4. Third party verified to ANSI/TIA-568C Category 6A 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: $\leq 20.3 \Omega / 1000'$ | 66.6 Ω /KM
 DCR Unbalance: $\leq 5\%$
 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: $\leq 330 \text{ pF}/100\text{M}$
 Maximum current: 1.4A@25°C

Insulation

Polyolefin
 Wall thickness: 0.012" | 0.30mm
 Diameter: 0.046" | 1.18mm

Regulatory

ANSI/TIA-568-C Category 6A
 NEC: CMR 60°C
 CEC: CMG FT4 60°C
 EU RoHS-2 2011/65/EU Compliant

Color Code

Pair 1: Orange, White
 Pair 2: Blue, White
 Pair 3: Green, White
 Pair 4: Brown, White

Packages

Reel: 1000' | 305M
 Weight: 43 Lbs/1000' | 64 Kg/KM

Assembly

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

Installation

Pull Tension: 25 Lbs | 111 N
 Bend radius: 3.27" | 83mm unloaded
 Bend radius: 6.54" | 166mm loaded

Construct

Ripcord under jacket

Applications

Riser LAN systems 10/100/1000/10GBaseT
 Riser 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

Jacket

Flame rated polyvinyl chloride
 Colors: Black, Blue, White
 Wall thickness: 0.043" | 1.10mm
 Diameter: 0.327" | 8.30mm

Final Outside Diameter (inches)

0.327

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Specification Revision Date:

March 1, 2014

Category 6A Performance Chart. Values above 500MHz for reference only

Frequency (MHz)	IL Max dB/100m	NEXT Min dB/100m	PSNEXT Min dB/100m	ACR Min dB/100m	PSACR Min dB/100m	ACRF Min dB/100m	PSACRF min dB/100m	Return Loss Min dB/100m	Prop. Delay Max ns/100m	PSANEXT Min dB/100m	PSAACRF Min dB/100m
1	2.08	74.3	72.3	72.22	70.22	67.8	64.8	20.00	570.00	67.00	67.00
4	3.80	65.27	63.27	61.47	59.47	55.76	52.76	23.01	552.00	67.00	66.16
8	5.31	60.75	58.75	55.44	53.44	49.74	46.74	24.52	546.73	67.00	60.14
10	5.93	59.30	57.30	53.37	51.37	47.80	44.80	25.00	545.38	67.00	58.20
16	7.49	56.24	54.24	48.75	46.75	43.72	40.72	25.00	543.00	67.00	54.12
20	8.38	54.78	52.78	46.4	44.4	41.78	38.78	25.00	542.05	67.00	52.18
25	9.38	53.33	51.33	43.95	41.95	39.84	36.84	24.32	541.20	67.00	50.24
31.25	10.50	51.88	49.88	41.38	39.38	37.90	34.90	23.64	540.44	67.00	48.30
62.5	14.99	47.36	45.36	32.37	30.37	31.88	28.88	21.54	538.55	65.56	42.28
100	19.14	44.30	42.30	25.16	23.16	27.80	24.80	20.11	537.60	62.50	38.20
150	23.68	41.66	39.66	17.98	15.98	24.28	21.28	18.87	536.94	59.86	34.68
200	27.58	39.78	37.78	12.2	10.2	21.78	18.78	18.00	536.55	57.98	32.18
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	56.53	30.24
300	34.27	37.14	35.14	2.87	0.87	18.26	15.26	16.77	536.08	55.34	28.66
350	37.25	36.14	34.14	-1.11	-3.11	16.92	13.92	16.30	535.92	54.34	27.32
400	40.05	35.27	33.27	-4.78	-6.78	15.76	12.76	15.89	535.80	53.47	26.16
450	42.71	34.50	32.50	-8.21	-10.21	14.74	11.74	15.53	535.70	52.70	25.14
500	45.26	33.82	31.82	-11.44	-13.44	13.82	10.82	15.21	535.61	52.02	24.22
550	47.70	33.19	31.19	-14.51	-16.51	12.99	9.99	14.92	535.54	51.39	23.39
600	50.05	32.63	30.63	-17.42	-19.42	12.24	9.24	14.66	535.47	50.83	22.64
650	52.33	32.11	30.11	-20.22	-22.22	11.54	8.54	14.42	535.41	50.31	21.94