

Technical Specifications

Product Line: RVLNRC6

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 6 performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC article(s) 725, 800, and 760.

Conductor

Cat 6: 23.5 AWG
 Solid annealed bare copper conductors
 Diameter: 0.021" | 0.535mm

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

Insulation

Thermoplastic polyolefin
 Wall thickness: 0.010" | 0.25mm
 Diameter: 0.038" | 0.96mm

Regulatory

ANSI/TIA-568.2-D Category 6
 NEC: CM 60°C
 CEC: CMG FT4 60°C
 Eurospec CPR Eca
 EU RoHS III 2015/863/EU Compliant
 REACH (EC) No 1907/2006 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: 29 Lbs/1000' | 43 Kg/KM

Assembly

Pairs twisted in varying lay lengths with co-extruded like striped conductor
 Each pair run in an individual polyolefin X separator interstice

Installation

Pull Tension: 25 Lbs | 111 N
 Bend radius: 0.92" | 24mm unloaded
 Bend radius: 1.84" | 48mm loaded

Construct

Ripcord under jacket

Applications

Riser LAN systems 10/100/1000BaseT
 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, Green, Gray, Yellow
 Wall thickness: 0.022" | 0.56mm
 Diameter: 0.228" | 5.80mm

Final Outside Diameter (inches)

0.228

Specification Revision Date:

December 5, 2019

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Cat6 Performance Data:

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	PropagationDelay	DelaySkew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.03	74.30	72.30	72.27	70.27	67.80	64.80	20.00	570.00	45.00
4	3.78	65.27	63.27	61.49	59.49	55.76	52.76	23.01	552.00	
8	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	546.73	
10	5.95	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545.38	
16	7.55	56.24	54.24	48.69	46.69	43.72	40.72	25.00	543.00	
20	8.47	54.78	52.78	46.31	44.31	41.78	38.78	25.00	542.05	
25	9.51	53.33	51.33	43.82	41.82	39.84	36.84	24.32	541.20	
31.25	10.67	51.88	49.88	41.21	39.21	37.90	34.90	23.64	540.44	
62.5	15.38	47.36	45.36	31.98	29.98	31.88	28.88	21.54	538.55	
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	
150	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	536.94	
200	28.98	39.78	37.78	10.80	8.80	21.78	18.78	18.00	536.55	
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	
300	36.43	37.14	35.14	0.71	-1.29	18.26	15.26	16.77	536.08	
350	39.79	36.14	34.14	-3.65	-5.65	16.92	13.92	16.30	535.92	
400	42.97	35.27	33.27	-7.70	-9.70	15.76	12.76	15.89	535.80	
450	46.01	34.50	32.50	-11.51	-13.51	14.74	11.74	15.53	535.70	
500	48.94	33.82	31.82	-15.12	-17.12	13.82	10.82	15.21	535.61	
550	51.76	33.19	31.19	-18.57	-20.57	12.99	9.99	14.92	535.54	

Values above 250MHz are for information only.