



Technical Specifications

Product Line: CAT5E-4C-J

Description

Quad 4 pair 24 AWG stranded, twisted, and unshielded cables in one jacket
NEC type CM and CEC type CMG FT4. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC articles 725 and 800.

Conductor

Cat 5e: 24 AWG
Solid annealed bare copper conductors
Diameter: 0.020" | 0.505mm

Electrical

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

High density polyethylene
Wall thickness: 0.007" | 0.18mm
Diameter: 0.034" | 0.87mm

Regulatory

NEC: CM 75°C
CEC: CMG FT4 60°C
EU RoHS 2002/95/EC Compliant

Color Code

Each cable gray numbered jacket
Each cable conductor 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: 500' | 152M
Weight: 150 Lbs/1000' | 224 Kg/KM

Assembly

Each category cable:
Polyvinyl chloride jacket
Colors: Gray, numbered 001 through 004
Wall thickness: 0.020" | 0.50mm
Diameter: 0.197" | 5.0mm

Installation

Pull Tension: 104 Lbs | 463 N
Bend radius: 5.90" | 150mm unloaded
Bend radius: 11.80" | 300mm loaded

Construct

4 jacketed category 5 cables cabled around a central filler
Open polyester ribbon binder
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





Technical Specifications

Product Line: CAT5E-4C-J

Jacket

Polyvinyl chloride

Colors: Green

Wall thickness: 0.040" | 1.00mm

Diameter: 0.590" | 15.0mm

Final Outside Diameter (inches)

0.590

Specification Revision Date:

September 11, 2009

Category 5e 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. |
| 0.772 | 1.8 | 67.0 | 64.0 | 65.2 | 62.2 | 66.0 | 63.0 | 19.4 |
| 1.0 | 2.0 | 65.3 | 62.3 | 63.3 | 60.3 | 63.8 | 60.8 | 20.0 |
| 4.0 | 4.1 | 56.3 | 53.3 | 52.2 | 49.2 | 51.7 | 48.7 | 23.0 |
| 8.0 | 5.8 | 51.8 | 48.8 | 46.0 | 43.0 | 45.7 | 42.7 | 24.5 |
| 10.0 | 6.5 | 50.3 | 47.3 | 43.8 | 40.8 | 43.8 | 40.8 | 25.0 |
| 16.0 | 8.2 | 47.3 | 44.3 | 39.1 | 36.1 | 39.7 | 36.7 | 25.0 |
| 20.0 | 9.3 | 45.8 | 42.8 | 36.5 | 33.5 | 37.7 | 34.7 | 25.0 |
| 25.0 | 10.4 | 44.3 | 41.3 | 33.9 | 30.9 | 35.8 | 32.8 | 24.3 |
| 31.25 | 11.7 | 42.9 | 39.9 | 31.2 | 28.2 | 33.9 | 30.9 | 23.6 |
| 62.5 | 17.0 | 38.4 | 35.4 | 21.4 | 18.4 | 27.8 | 24.8 | 21.5 |
| 100.0 | 22.0 | 35.3 | 32.3 | 13.3 | 10.3 | 23.8 | 20.8 | 20.1 |

