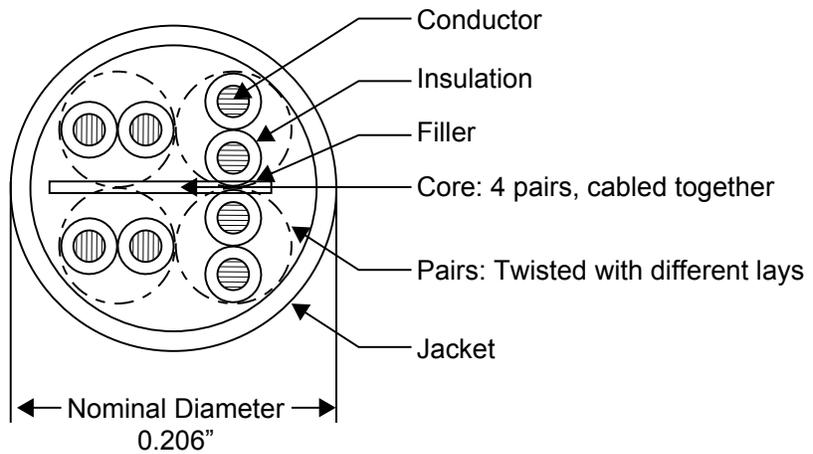


620 Series CMR Cat 6 UTP Cable Cut Sheet

219560-X



Description

AMP NETCONNECT Category 6 cables exceed ANSI/TIA-568-C Category 6 and ISO/IEC 11801 ClassE performance requirements by significant margins on all parameters. The AMP NETCONNECT Category 6 System complies with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video and analog and digital voice (VoIP).

AMP NETCONNECT Category 6 UTP cables are available in standard colors including white, gray, blue and yellow. Category 6 Cables from AMP NETCONNECT feature lead-free jacketing. Packaging is on reels, reel-in-a-box, or a pull-box, with standard put-ups being 1000 ft splice-free lengths.

Specification

Horizontal cabling shall be 24 AWG, 4-pair UTP, NEC/NFPA CMR rated and be independently verified for compliance. Cable jacketing shall be white, gray, blue or yellow and shall be lead-free. Cable shall exceed all ANSI/TIA and ISO Category 6 /Class E requirements as well as meet the performance requirements listed in the table shown on page 2.

Cable performance shall be independently verified and characterized to 600 MHz. Cable shall be supplied on reels, reel-in-a-box, or a pull-box. Independent verification for flammability compliance shall be to NEC article 800 and NFPA 70; CMR ANSI/UL 1666. Horizontal cable shall be AMP NETCONNECT part number 219560-X.

ORDERING INFORMATION

| Product Description | Packaging | Part Numbers | | | |
|---|--------------------|--------------|------------|------------|------------|
| | | White | Gray | Blue | Yellow |
| Category 6 UTP Cable, 4-Pair, Riser (CMR) Rated | 1000 ft Pull-box | 5-219560-2 | 5-219560-4 | 5-219560-6 | 5-219560-8 |
| | 1000ft Reel-in-Box | 219560-2 | 219560-4 | 219560-6 | 219560-8 |
| | 1000 ft Reel | 219560-1 | 219560-3 | 219560-5 | 219560-7 |



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PERFORMANCE DATA

| FREQ MHZ | FITTED IMPEDANCE Ohms | INSERTION LOSS dB/100m | | RETURN LOSS dB/100m | | PAIR-PAIR NEXT dB/100m | | PSNEXT dB/100m | |
|-------------|--------------------------|---------------------------|------|------------------------|------|---------------------------|------|-------------------|------|
| | Spec | Max | Spec | Min | Spec | Min | Spec | Min | Spec |
| 1 | 100+/-5 | 1.7 | 2.0 | 28.5 | 20.0 | 83.8 | 74.3 | 81.9 | 72.3 |
| 4 | 100+/-3 | 3.4 | 3.8 | 32.1 | 22.9 | 74.9 | 65.3 | 74.3 | 63.3 |
| 8 | 100+/-3 | 4.9 | 5.3 | 35.0 | 24.5 | 74.4 | 60.8 | 71.0 | 58.8 |
| 10 | 100+/-3 | 5.5 | 6.0 | 34.6 | 25.0 | 70.3 | 59.3 | 68.0 | 57.3 |
| 16 | 100+/-3 | 7.0 | 7.6 | 31.7 | 25.0 | 67.2 | 56.2 | 66.7 | 54.2 |
| 20 | 100+/-3 | 7.9 | 8.5 | 32.1 | 25.0 | 66.8 | 54.8 | 64.7 | 52.8 |
| 25 | 100+/-3 | 8.9 | 9.5 | 36.5 | 24.3 | 65.6 | 53.3 | 63.6 | 51.3 |
| 31.25 | 100+/-3 | 9.9 | 10.7 | 36.7 | 23.6 | 61.8 | 51.9 | 60.9 | 49.9 |
| 62.5 | 100+/-3 | 14.3 | 15.4 | 34.0 | 21.5 | 61.0 | 47.4 | 59.3 | 45.4 |
| 100 | 100+/-3 | 18.4 | 19.8 | 30.8 | 20.1 | 60.2 | 44.3 | 57.4 | 42.3 |
| 155 | 100+/-3 | 23.3 | 25.2 | 27.3 | 18.8 | 54.8 | 41.4 | 51.4 | 39.4 |
| 200 | 100+/-3 | 26.8 | 29.0 | 31.0 | 18.0 | 54.9 | 39.8 | 52.4 | 37.8 |
| 250 | 100+/-3 | 30.4 | 32.8 | 28.6 | 17.3 | 49.5 | 38.3 | 48.5 | 36.3 |
| 300 | 100+/-3 | 33.7 | - | 27.2 | - | 49.0 | - | 48.2 | - |
| 350 | 100+/-3 | 36.7 | - | 24.3 | - | 46.3 | - | 44.8 | - |
| 400 | 100+/-3 | 39.6 | - | 25.0 | - | 47.5 | - | 45.2 | - |
| 550 | 100+/-3 | 47.7 | - | 18.6 | - | 40.2 | - | 39.4 | - |
| 600 | 100+/-3 | 47.5 | - | 15.2 | - | 38.3 | - | 35.4 | - |

PERFORMANCE DATA

| FREQ MHZ | PAIR-PAIR ACR dB/100m | | PSACR dB/100m | | PAIR-PAIR ACRF dB/100m | | PSACRF dB/100m | | TCL dB/100m | ELTCTL dB/100m |
|-------------|--------------------------|------|------------------|------|---------------------------|------|-------------------|------|----------------|-------------------|
| | Min | Spec | Min | Spec | Min | Spec | Min | Spec | Min | Min |
| 1 | 82.2 | 72.3 | 80.3 | 70.3 | 73.6 | 67.8 | 72.6 | 64.8 | 40.0 | 35.0 |
| 4 | 71.7 | 61.5 | 71.2 | 59.5 | 62.7 | 55.8 | 61.8 | 52.8 | 40.0 | 23.0 |
| 8 | 69.8 | 55.4 | 66.4 | 53.4 | 57.2 | 49.7 | 56.2 | 46.7 | 40.0 | 16.9 |
| 10 | 65.1 | 53.3 | 62.8 | 51.3 | 55.2 | 47.8 | 54.2 | 44.8 | 40.0 | 15.0 |
| 16 | 60.5 | 48.7 | 60.0 | 46.7 | 51.1 | 43.7 | 49.8 | 40.7 | 38.0 | 10.9 |
| 20 | 59.4 | 46.3 | 57.4 | 44.3 | 49.3 | 41.8 | 48.2 | 38.8 | 37.0 | 9.0 |
| 25 | 57.3 | 43.8 | 55.3 | 41.8 | 47.4 | 39.8 | 46.5 | 36.8 | 36.0 | 7.0 |
| 31.25 | 52.5 | 41.2 | 51.3 | 39.2 | 45.5 | 37.9 | 44.4 | 34.9 | 35.1 | 5.1 |
| 62.5 | 47.3 | 32.0 | 45.7 | 30.0 | 40.1 | 31.9 | 39.4 | 28.9 | 32.0 | - |
| 100 | 42.7 | 24.5 | 39.8 | 22.5 | 36.8 | 27.8 | 35.9 | 24.8 | 30.0 | - |
| 155 | 32.4 | 16.3 | 28.9 | 14.3 | 33.6 | 24.0 | 33.2 | 21.0 | 28.1 | - |
| 200 | 29.6 | 10.8 | 26.9 | 8.8 | 31.7 | 21.8 | 30.6 | 18.8 | 27.0 | - |
| 250 | 20.3 | 5.5 | 19.3 | 3.5 | 29.1 | 19.8 | 28.9 | 16.8 | 26.0 | - |
| 300 | 16.6 | - | 15.8 | - | 26.2 | - | 25.5 | - | - | - |
| 350 | 10.9 | - | 9.4 | - | 21.3 | - | 21.8 | - | - | - |
| 400 | 10.1 | - | 7.9 | - | 22.1 | - | 22.5 | - | - | - |
| 550 | - | - | - | - | 25.7 | - | 24.7 | - | - | - |
| 600 | - | - | - | - | 11.5 | - | 9.6 | - | - | - |

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements.

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219560-X

SPECIFICATIONS

| | |
|---|--|
| Mutual Capacitance: | 5.6 nF/100 m maximum |
| Conductor DC Resistance: | 28.6 Ω /1000 ft (9.38 Ω /100 m) maximum |
| Voltage: | 300 VDC |
| Delay Skew: | 25 ns/100 m |
| Propagation Delay: | 485 ns/100 m @ 250 MHz |
| Nominal Velocity of Propagation: | 69% |
| Operating Temperature: | -20°C - 60°C (-4°F - 140°F) |
| Storage Temperature: | -20°C - 80°C (-4°F - 176°F) |
| Installation Temperature: | 5°C - 50°C (41°F - 122°F) |
| Bend Radius: | 4 × cable diameter |
| Packaging: 1000ft Reel-in-a-box: | 31 lbs/kft |
| 1000ft Reel: | 28 lbs/kft |
| 1000ft Pull-box: | 28 lbs/kft |
| Materials: Conductors: | 24 AWG, Solid Copper (0.0216" nominal) |
| Insulation: | Ø.038 nominal, polyethylene |
| Jacket: | Ø.206 nominal, FR PVC |
| Compliances: | UL Subject 444 (UL)-C(UL) Type CMR ICEA S-90-661 ETL Verified TIA-568-C.2 Category 6 Horizontal Cable Requirements ISO/IEC 11801 Category 6 Horizontal Cable Requirements 2002/95/EC RoHS |



DATA SHEET



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