

Category 6A F/UTP 4-Pair Cable - North America

Siemon's Category 6A F/UTP cable provides channel performance exceeding ANSI/TIA-568.2-D Category 6A requirements. When combined with our Z-Max® shielded connectivity, the result is best in class channel performance capable of supporting 10GBASE-T operation over 100-meter, 4-connector topologies. In addition the screened construction ensures virtually zero alien crosstalk. The Category 6A F/UTP cabling system supports emerging and converging IP applications like Voice Over IP (VoIP), IP video and future 10 gigabit applications.



Siemon's **PowerGUARD** technology with a 75°C operating temperature improves heat dissipation for reduced length derating and bundling requirements in remote powering applications, including PoE and power over HDBaseT (POH).

COMPLIANCE

- ANSI/TIA-568.2-D
- IEC 61156-5 Ed 2.0
- ISO/IEC 11801-1 Ed 1.0
- UL CMR and CSA FT4
- UL CMP and CSA FT6

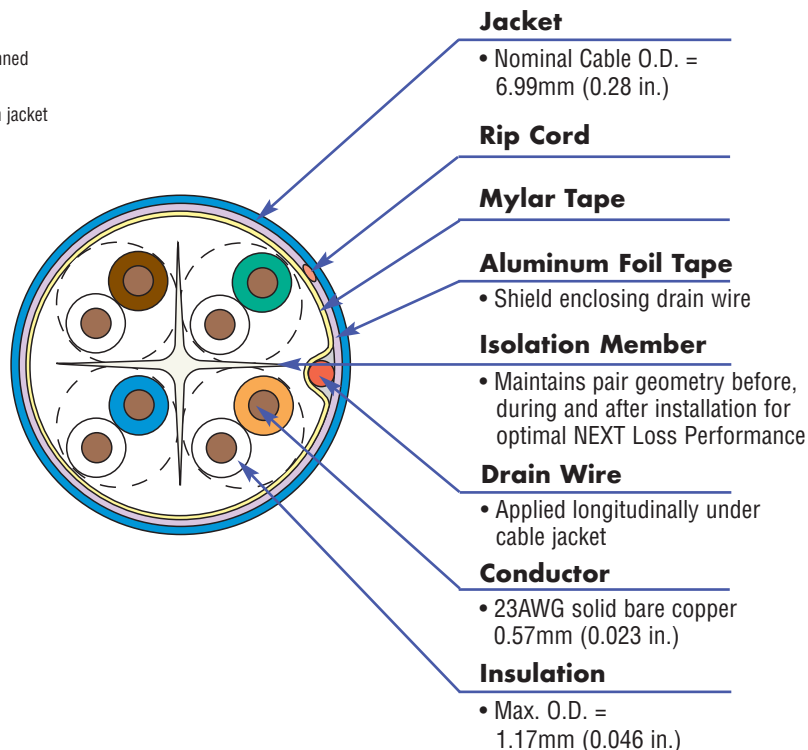
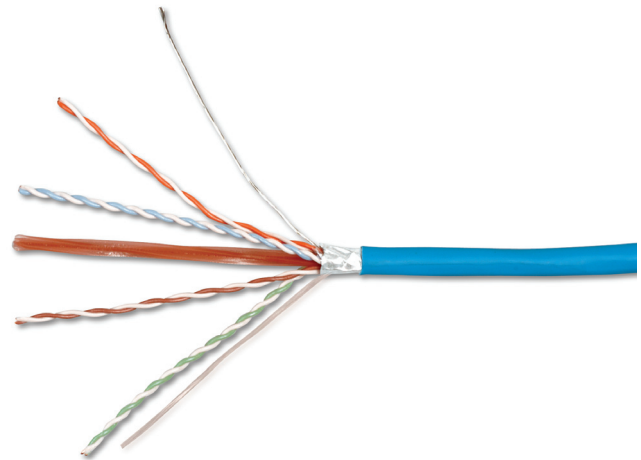
CABLE CONSTRUCTION

- F/UTP
- 0.57mm (0.023 in.) 23 AWG solid bare copper
- 7.1mm (0.28 in.) nom. jacket diameter
- Central isolation member
- Shield is an aluminum foil tape enclosing a tinned copper drain wire
- Reverse sequential measurement markings on jacket

APPLICATIONS SUPPORT

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-T
- HDBASE-T
- IEEE 802.3af (type 1 PoE)
- IEEE 802.3at (type 2 PoE)
- IEEE 802.3bt (type 3 PoE)
- IEEE 802.3bt (type 4 PoE)
- Power over HDBaseT (PoH)

Supports all applications designed for Category 6A or lower cabling



Product Information

ELECTRICAL SPECIFICATIONS

| | |
|---------------------------------|--|
| DC Resistance | <8.5 Ω/100m |
| DC Resistance Unbalance | 5% |
| Mutual Capacitance | 5.6 nF/100m |
| Capacitance Unbalance | <330 pF/100m |
| Characteristic Impedance (ohms) | 1-100 MHz: 100 ± 15% 100-750 MHz: 100 ± 22% |
| NVP | 67% |
| TCL | 30-10 log(f/100) dB |
| Delay Skew | ≤45ns |
| PoE | Suitable for PoE (Type1,2,3,4 & PoH) |

PHYSICAL PROPERTIES

| | CMP | CMR |
|--------------------------|---------------------------|---------------------------|
| Pulling Tension (max) | 110N (25 lbf) | 110N (25 lbf) |
| Bend Radius (min) | 50mm (2.0 in.) | 50mm (2.0 in.) |
| Installation Temperature | 0 to 60°C (+32 to 140°F) | 0 to 60°C (+32 to 140°F) |
| Storage Temperature | -20 to 75°C (-4 to 167°F) | -20 to 75°C (-4 to 167°F) |
| Operating Temperature | -20 to 75°C (-4 to 167°F) | -20 to 75°C (-4 to 167°F) |

TRANSMISSION PERFORMANCE



GUARANTEED WORSE CASE



SIEMON TYPICAL

| Frequency (MHz) | Insertion Loss (dB) | | NEXT (dB) | | PS NEXT (dB) | | ACR (dB) | | PSACR (dB) | | ACR-F (dB) | | PS ACR-F (dB) | | Return Loss (dB) | | Propagation Delay (ns) | |
|-----------------|---------------------|---------|------------|---------|--------------|---------|------------|---------|------------|---------|------------|---------|---------------|---------|------------------|---------|------------------------|---------|
| | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical | Guaranteed | Typical |
| 1.0* | 2.0 | 1.8 | 74.3 | 86.0 | 72.3 | 82.3 | 72.3 | 84.2 | 70.3 | 80.5 | 67.8 | 91.0 | 64.8 | 85.0 | 20.0 | 33.0 | 570 | 545 |
| 4.0 | 3.8 | 3.4 | 65.3 | 77.0 | 63.3 | 73.3 | 61.5 | 73.6 | 59.5 | 69.9 | 55.8 | 79.0 | 52.8 | 73.0 | 23.0 | 35.5 | 552 | 527 |
| 10.0 | 6.0 | 5.4 | 59.3 | 71.0 | 57.3 | 67.3 | 53.3 | 65.6 | 51.3 | 61.9 | 47.8 | 71.0 | 44.8 | 65.0 | 25.0 | 38.0 | 545 | 520 |
| 16.0 | 7.6 | 6.9 | 56.2 | 68.0 | 54.2 | 64.2 | 46.7 | 61.1 | 46.7 | 57.3 | 43.7 | 67.0 | 40.7 | 61.0 | 25.0 | 35.2 | 543 | 518 |
| 20.0 | 8.5 | 7.7 | 54.8 | 67.0 | 52.8 | 62.8 | 46.3 | 59.3 | 44.3 | 55.1 | 41.8 | 65.0 | 38.8 | 59.0 | 25.0 | 35.0 | 542 | 517 |
| 31.25 | 10.7 | 9.9 | 51.9 | 64.0 | 49.9 | 59.9 | 41.2 | 54.1 | 39.2 | 50.0 | 37.9 | 61.0 | 34.9 | 55.0 | 23.6 | 33.1 | 540 | 515 |
| 62.5 | 15.4 | 14.3 | 47.4 | 59.0 | 45.4 | 55.4 | 32.0 | 44.7 | 30.0 | 41.1 | 31.9 | 55.0 | 28.9 | 49.0 | 21.5 | 32.2 | 539 | 514 |
| 100.0 | 19.8 | 18.1 | 44.3 | 56.0 | 42.3 | 52.0 | 24.5 | 37.9 | 22.5 | 33.9 | 27.8 | 51.0 | 24.8 | 45.0 | 20.1 | 31.6 | 538 | 513 |
| 200.0 | 29.0 | 27.3 | 39.8 | 52.0 | 37.8 | 47.8 | 10.8 | 24.7 | 8.8 | 20.5 | 21.8 | 45.0 | 18.8 | 39.0 | 18.0 | 29.8 | 537 | 512 |
| 250.0 | 32.8 | 31.1 | 38.3 | 50.0 | 36.3 | 46.0 | 5.5 | 18.9 | 3.5 | 14.9 | 19.8 | 43.0 | 16.8 | 37.0 | 17.3 | 28.7 | 536 | 511 |
| 300.0 | 36.4 | 35.0 | 37.1 | 49.0 | 35.1 | 45.0 | 0.7 | 14.0 | -1.3 | 10.0 | 18.3 | 38.0 | 15.3 | 35.0 | 16.8 | 28.0 | 536 | 511 |
| 400.0 | 43.0 | 40.0 | 35.3 | 47.0 | 33.3 | 43.0 | -7.7 | 7.0 | -9.7 | 3.0 | 15.8 | 36.0 | 12.8 | 33.0 | 15.9 | 27.1 | 536 | 511 |
| 500.0 | 48.9 | 42.0 | 33.8 | 47.0 | 31.8 | 42.0 | -15.1 | 5.0 | -17.1 | 0.0 | 13.8 | 34.0 | 10.8 | 32.0 | 15.2 | 26.0 | 536 | 510 |
| 550.0* | 51.8 | 43.0 | 33.2 | 46.0 | 31.2 | 42.0 | -18.6 | 3.0 | -20.6 | -1.0 | 13.0 | 33.0 | 10.0 | 31.0 | 14.9 | 26.0 | 536 | 510 |
| 625.0* | 55.8 | 44.9 | 32.4 | 46.0 | 30.4 | 41.0 | -23.5 | 1.1 | -25.5 | -3.9 | 11.9 | 33.0 | 8.9 | 29.0 | 14.5 | 25.0 | 535 | 505 |
| 750.0* | 62.3 | 49.0 | 31.2 | 45.0 | 29.2 | 41.0 | -31.1 | -4.0 | -33.1 | -8.0 | 10.3 | 32.0 | 7.3 | 27.0 | 14.0 | 25.0 | 535 | 504 |

*Values for frequencies above industry requirements are for information only.

All performance based on 100 meters (328 ft.).

Ordering Information

9A6(X)4-A5-(XX)-R1A 305m (1000 ft.) Reel (North America Only)

Jacket Color

- 01 = Black 04 = Gray 07 = Green
- 02 = White 05 = Yellow 08 = Violet
- 03 = Red 06 = Blue 09 = Orange

Jacket Material

- P = Plenum (CMP, CSA FT6)
- R = Riser (CMR, CSA FT4)

Lead time and minimum order quantities may vary by cable type. Please contact Customer Service for details.

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

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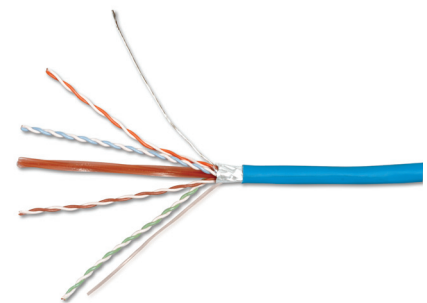
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