



Description

23 AWG CAT6A Plenum, High-Performance Data Cable

Applicable Standards

- ETL Listed Type CMP
- C(ETL) listed FT6
- TIA - 568-B.2-10, and ISO/IEC 11801
- Alien Crosstalk and ROHS Compliant
- ATM 155 Mbps
- 10/100/1000/10G Base-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100 Mbps TP-PMD
- ISDN, ADSL
- ATM LAN 1.2G
- Horizontal Distribution & Backbone Cabling

Physical Characteristics

| | |
|---------------------------|-------------------|
| Number of Conductor Pairs | 4 |
| Size | 23 AWG |
| Stranding | Solid |
| Conductor Material | Solid Bare Copper |
| Shield Material | Unshielded |
| Rip Cord | Yes |
| Insulation Material | FEP |
| Insulation Diameter | 0.041 in. |
| Jacket Material | Plenum Rated PVC |
| Jacket Diameter | 0.3543 in. |
| Jacket Spacer Thickness | 0.0393 in. |
| Outer Sheath Thickness | .0177 in. |
| Nominal Weight | 54 lbs. |

Color Code

| | | |
|--------|----------------|--------|
| Pair 1 | White / Blue | Blue |
| Pair 2 | White / Orange | Orange |
| Pair 3 | White / Green | Green |
| Pair 4 | White / Brown | Brown |

Cable Marking

XXXXXX 23AWG 4 PR UTP CMP 75C C(UL)US VERIFIED (UL)
CATEGORY 6A ANSI/TIA-568-C.2 0000FT

Electrical Performance

| Frequency (MHz) | Attenuation (dB/100m) | Return loss (dB/100m) | NEXT (dB/100m) | PS-NEXT (dB) |
|-----------------|-----------------------|-----------------------|--------------------|----------------------|
| 1 | 2.1 | 20.0 | 74.3 | 72.3 |
| 4 | 3.8 | 23.0 | 65.3 | 63.3 |
| 8 | 5.3 | 24.5 | 60.8 | 58.8 |
| 10 | 5.9 | 25.0 | 59.3 | 57.3 |
| 16 | 7.5 | 25.0 | 56.2 | 54.2 |
| 20 | 8.4 | 25.0 | 54.8 | 52.8 |
| 25 | 9.4 | 24.3 | 53.3 | 51.3 |
| 31.25 | 10.5 | 23.6 | 51.9 | 49.9 |
| 62.5 | 15.0 | 21.5 | 47.4 | 45.4 |
| 100 | 19.1 | 20.1 | 44.3 | 42.3 |
| 200 | 27.6 | 18.0 | 39.8 | 37.8 |
| 250 | 31.1 | 17.3 | 38.3 | 36.3 |
| 300 | 34.3 | 16.8 | 37.1 | 35.1 |
| 400 | 40.1 | 15.9 | 35.3 | 33.3 |
| 500 | 45.3 | 15.2 | 33.8 | 31.8 |
| Frequency (MHz) | ELFEXT (dB/100m) | PS-ELFEXT (dB/100m) | PS-ANEXT (dB/100m) | PS-AELFEXT (dB/100m) |
| 1 | 67.8 | 64.8 | 67.0 | 67.0 |
| 4 | 55.8 | 52.8 | 67.0 | 66.2 |
| 8 | 49.7 | 46.7 | 67.0 | 60.1 |
| 10 | 47.8 | 44.8 | 67.0 | 56.2 |
| 16 | 43.7 | 40.7 | 67.0 | 54.1 |
| 20 | 41.8 | 38.8 | 67.0 | 52.2 |
| 25 | 39.8 | 36.8 | 67.0 | 50.2 |
| 31.25 | 37.9 | 34.9 | 67.0 | 48.3 |
| 62.5 | 31.9 | 28.9 | 65.6 | 42.3 |
| 100 | 27.8 | 24.8 | 62.5 | 38.2 |
| 200 | 21.8 | 18.8 | 58.0 | 32.2 |
| 250 | 19.8 | 16.8 | 56.5 | 30.2 |
| 300 | 18.3 | 15.3 | 55.3 | 28.7 |
| 400 | 15.8 | 12.8 | 53.5 | 26.2 |
| 500 | 13.8 | 10.8 | 52.0 | 24.2 |

* Values above 250MHz are information only

Electrical Characteristics

| | |
|--|------------------------------|
| DC Resistance | 9.38 Ω / 100 Meters |
| DC Resistance Unbalanced | 5% |
| Mutual Capacitance | 5.6 nF / 100 Meters |
| Capacitance Unbalance (Pair to Ground) | 330 pF / 100 Meters |
| Characteristic Impedance | 100 ± 15 Ω |
| Delay Skew | 45 nS / 100 Meters |
| Temperature Rating | Installation: 0 to +60°C |
| | Storage: -20°C to +80°C |
| Tensile Strength | Before: ≥ 13.8 Mpa |
| Elongation | Aging: ≥ 100% |
| Aging Condition | 100°C x 168 hours |
| | After Aging: ≥ 85% of unaged |
| | ≥ 50% of unaged |

Part Numbers

| Part Number | Color | Put-up |
|-------------|-------|-------------|
| 6A04UPBL2 | Blue | 1,000' Reel |