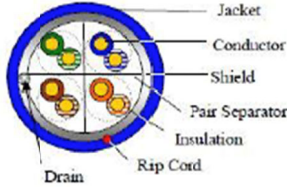


Category 6E 600MHz FTP Plenum (CMP) Cable

Cable Detail



Description

23 AWG Shielded Plenum Twisted Pair, High-Performance Data Cable

Applicable Standards

- C(ETL) US CMP
- CMP Rating FT6
- ETL Verified to ANSI/TIA/EIA - 568-C.2, Category 6
- National Electric Code - Article 800
- UL Subject 444)



Physical Characteristics

| | |
|---------------------------|----------------------------|
| Conductor Material | Solid Annealed Bare Copper |
| Number of Conductor Pairs | 4 |
| Size | 23 AWG |
| Stranding | Solid |
| Insulation Material | FEP |
| Overall Diameter | 0.045 in. ± 0.0002 in |
| Average Thickness | 0.0085 in |
| Min. Point Thickness | 0.00767 in. |
| Insulation Diameter | 0.0402 in. +/- 0.012 in. |
| Twisted Pair Diameter | 0.0803 in. +/- 0.0078 in. |
| PE-Tape | Overlapping rate >= 15% |
| AL-Foil | Overlapping rate >= 15% |
| Assembly Diameter | 0.2559 in. +/- 0.0078 in. |
| Jacket Material | Low Smoke FR-PVC |
| Average Thickness | 0.0197 in. |
| Min. Point Thickness | 0.0236 in. |
| Nominal Outer Diameter | 0.311 in. ± 0.008 in. |
| Nominal Weight | 52 lbs. |
| Ripcord | Yes |

Mechanical Characteristics

| | | |
|--------------------|--------------|-------------------|
| Temperature Rating | Installation | 0°C to + 60°C |
| | Operating | -20°C to + 75°C |
| Tensile Strength | Before | >= 13.8 Mpa |
| Elongation | Aging | >= 100% |
| | | 100°C x 168 hours |
| | After | >= 85% of unaged |
| Aging Condition | Aging | >= 50% of unaged |

Insulation Colors

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

Part Numbers Jacket Color Package

6E04FPXX2 Blue, Grey 1000FT / Reel

Electrical Characteristics

| | | |
|--|------------------------|-------------|
| Max. Conductor DC Resistance @ 20°C | 28.6 Ω / 100 Feet | |
| Maximum DC Resistance Unbalanced @ 20°C | 5% | |
| Max. Pair-to-Pair Ground Capacitance Unbalance | 330 pF / 100 Meters | |
| Characteristic Impedance (1 ~ 350 MHz) | ≤ 100 ± 15 Ω | |
| Mutual Capacitance | 14 nF / 100 ft Nominal | |
| Max. Delay Skew | 45 nS / 100 m | |
| Velocity of Propagation | 72% | |
| Characteristic Impedance | from 0.772 - 100 MHz | 100 +/- 15% |
| | from 101 - 250 MHz | 100 +/- 22% |
| | from 251 - 550 MHz | 100 +/- 32% |

Electrical Performance

| Frequency (MHz) | Attenuation (dB/100m) Max. | Return loss (dB) Min. | NEXT (dB) Min. | PS-NEXT (dB) Min. |
|-----------------|----------------------------|-----------------------|----------------|-------------------|
| 1 | 2.10 | 20.0 | 75.3 | 72.3 |
| 4 | 3.80 | 23.0 | 66.3 | 63.3 |
| 8 | 5.30 | 24.5 | 61.8 | 58.8 |
| 10 | 5.90 | 25.0 | 60.3 | 57.3 |
| 16 | 7.50 | 25.0 | 57.2 | 54.2 |
| 20 | 8.40 | 25.0 | 55.8 | 52.8 |
| 25 | 9.40 | 24.3 | 54.3 | 51.3 |
| 31.25 | 10.50 | 23.6 | 52.9 | 49.9 |
| 62.5 | 15.00 | 21.5 | 48.4 | 45.4 |
| 100 | 19.10 | 20.1 | 45.3 | 42.3 |
| 200 | 27.60 | 18.0 | 40.8 | 37.8 |
| 250 | 31.10 | 15.6 | 39.3 | 36.6 |
| 300 | 34.30 | 16.8 | 38.1 | 35.1 |
| 500 | - | 15.2 | 34.8 | 31.5 |
| 600 | - | 14.7 | 33.6 | 30.6 |

| Frequency (MHz) | ELFEXT (dB/100m) Min. | PS-ELFEXT (dB) Min. | Delay (ns/100m) Max. |
|-----------------|-----------------------|---------------------|----------------------|
| 1 | 68.00 | 65.00 | 552.00 |
| 4 | 56.00 | 53.00 | 546.00 |
| 8 | 49.90 | 46.90 | 545.00 |
| 10 | 48.00 | 45.00 | 543.00 |
| 16 | 43.30 | 40.90 | 542.00 |
| 20 | 42.00 | 39.00 | 541.00 |
| 25 | 40.00 | 37.00 | 540.00 |
| 31.25 | 38.10 | 35.10 | 538.00 |
| 62.5 | 32.10 | 29.10 | 537.00 |
| 100 | 28.00 | 25.00 | 536.00 |
| 200 | 22.00 | 19.00 | 535.00 |
| 250 | 20.00 | 17.00 | 534.00 |
| 300 | 18.50 | 15.50 | 534.00 |
| 500 | 14.00 | 11.00 | - |
| 600 | 12.00 | 10.00 | - |

* Values above 250MHz are information only.

Cable Marking

CATEGORY 6E 600MHZ 23AWG 4PR FTP XXXXXXXX CMP C(ETL)US ETL
VERIFIED TO TIA-568C.2 ****FT