



Plenum - Multi-Conductor - Category 6 UTP - Bare Copper

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|---|---|---------------------|--------------------------|--|----------------------------|------------------|-----------------------|-------------------|
| General Description: | CAT6 (550MHz), 4 Pair, UTP-Unshielded, CMP (Plenum), 23 AWG, Solid Bare Copper Conductors, Geintech FEP/HDPE Insulation, Ripcord, Plenum PVC Jacket | | | | | | | |
| Physical Characteristics: | # of Pairs | AWG | Stranding | Conductor Material | Rip Cord | Separator | | |
| | 4 | 23 | Solid | Solid Bare Copper | Nylon | FFEP | | |
| Nominal Cable Diameter | 0.0224" | Minimum Bend Radius | | 1.80" | Nominal Weight | | | |
| Dielectric Material / Nom. Diameter | Geintech FEP (3pairs) / 0.039" | | | Outer Jacket Material | | CMP - Plenum PVC | | |
| | HDPE (1pair) / 0.0405" | | | Diameter over Jacket | | 0.224" ± 0.008" | | |
| Dielectric Avg. Thickness | 0.0084 ± 0.002" | | | Nom. Jacket Thickness | | 0.0197" | | |
| Flame Test of Cable | UL Fire testing of CMP | | | Minimum Spot | | 0.0157" | | |
| Mechanical Characteristics: | Installation Temperature Range | | | Operating Temperature Range | | | | |
| | (-) 20°C to (+) 60°C | | | (-) 20°C to (+) 75°C | | | | |
| Electrical Characteristics: | DC Resistance (max) | | DCR Unbalance (max) | | Nominal Mutual Capacitance | | | |
| | 7.32 Ω / 100m @ 20°C | | 5% (@ 20°C) | | 5.6 pF / 100m @ 1KHz | | | |
| Voltage | Maximum Skew | | Characteristic Impedence | | Velocity of Propagation | | Max Propagation Delay | |
| 300 | 45 ns / 100m | | 100 ± 15 Ω | | 69% Nom. | | 250MHz 536ns/100m | |
| Electrical Performance - TIA 568-C.2 | | | | Note: Values above 250 MHz are for information only | | | | |
| Frequency (MHz) | Attenuation (max) | NEXT (dB) (min) | PSNEXT (dB) (min) | ACR (dB) (min) | PSACR (dB) (min) | ACRF (dB) (min) | PSACRF (dB) (min) | Return Loss (min) |
| 1 | 3.0 | 65.0 | 62.0 | 62.1 | 59.0 | 64.2 | 61.2 | 19.0 |
| 4 | 3.5 | 64.1 | 61.8 | 60.6 | 58.3 | 52.2 | 49.2 | 21.0 |
| 10 | 5.6 | 59.4 | 55.5 | 54.4 | 49.9 | 44.2 | 41.2 | 21.0 |
| 16 | 7.0 | 57.8 | 52.2 | 52.3 | 45.2 | 40.1 | 37.1 | 20.0 |
| 20 | 7.9 | 53.1 | 50.7 | 45.2 | 42.8 | 38.2 | 35.2 | 19.5 |
| 31.25 | 10.0 | 50.0 | 47.5 | 40.0 | 37.6 | 34.3 | 31.3 | 18.5 |
| 62.5 | 14.4 | 45.1 | 42.7 | 30.8 | 28.3 | 28.3 | 25.3 | 16.0 |
| 100 | 18.6 | 41.8 | 39.3 | 23.4 | 20.8 | 24.2 | 21.2 | 14.0 |
| 150 | 22.1 | 39.2 | 36.8 | 15.4 | 14.2 | 21.6 | 17.8 | 12.7 |
| 200 | 27.4 | 36.9 | 34.3 | 9.9 | 7.2 | 18.2 | 15.2 | 11.0 |
| 250 | 35.3 | 35.3 | 32.7 | 4.6 | 2.0 | 16.2 | 13.2 | 10.0 |
| 350 | 43.2 | 31.0 | 28.5 | 1.6 | 0.0 | 13.1 | 10.1 | 8.9 |
| 550 | 52.0 | 25.6 | 22.5 | — | — | 10.6 | 7.6 | 7.2 |
| Cable Marking : | Geintech E329881 4PR 23AWG CMP (UL)C(UL) ---ETL VERIFIED TO ANSI/TIA-568-C.2 UTP CAT6 LAN CABLE MM/DD/YYYY ROHS COMPLIANT ****FT | | | | | | | |

| Part # | Color | Put-up | |
|----------|-------|--------|------------|
| P-CAT6BL | Blue | 1,000' | Reelex Box |
| P-CAT6WH | White | 1,000' | Reelex Box |

| Pair Color Code | |
|-----------------|-----------------------------|
| 1 | Blue/Blue+White Stripes |
| 2 | Orange/Orange+White Stripes |
| 3 | Green/Green+White Stripes |
| 4 | Brown/Brown+White Stripes |










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