

## Category 6 UTP Patch Cable, 28AWG×4P, PVC 50102143

### PRODUCT DESCRIPTION

#### • Cable Specifications:

CAT6 UTP 4 X 1P[28AWG(7/0.127mm±0.008mm BC)]  
CM PVC JACKET OD: 3.7±0.20mm

#### • Standard Reference:

- All Category 6 Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards
- ANSI/TIA-5682-D Cat.6
- ISO/IEC 3rd Edition 11801 Class E
- We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2011/65/EU

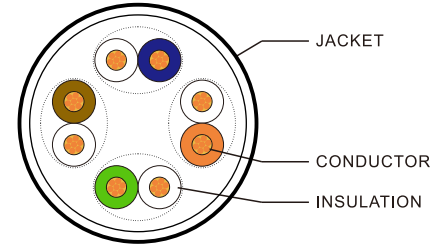
#### • Physical characteristic

- Rated temperature: 75°C
- Installation temperature: -20-60°C
- Operating temperature: -20-75°C
- Min bending radius:10xOD in Operation:8xOD after operation

#### • Application

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12)
- 250MHz Broadband Video Voice, T1, ISDN

### Cable Cross-Section Structure



| CABLE CONSTRUCTION |  |  |
|--------------------|--|--|
| Conductor          | Material   | Stranded Bare Copper   |
|                    | Nom.O.D (mm)   | 7/0.127±0.008mm 28AWGx4P   |
| Insulation HDPE    | Average Thickness(mm)  | 0.11   |
|                    | Insulation Dia.(±0.05mm)   | 0.64   |
|                    | Unaged Elongation  | Min. 300%  |
|                    | Unaged Tensile Strength  | Min.1.683 Kgf/mm <sup>2</sup>  |
| Code Color         | 1 Blue/Blue*White  | 2 Orange/Orange*White  |
|                    | 3 Green/Green*White  | 4 Brown/Brown*White  |
| Jacket CM PVC      | Average Thickness (mm)   | 0.4  |
|                    | Outer Dia.(±0.20mm)  | 3.7  |
|                    | Unaged Elongation  | Min. 100%  |
|                    | Unaged Tensile Strength  | Min.1.407 Kgf/mm <sup>2</sup>  |
|                    | Aging at 100°C for 168Hrs  | Min. elongation retention:50%<br>Min. tensile strength retention:75% |
| Marking            | CAT.6 U/UTP 28AWGX4P PATCH CONFORM TO ANSI/TIA-568.2-D & ISO/IEC 11801 |  |

| CHARACTERISTICS                   |                           |
|-----------------------------------|---------------------------|
| Dielectric Strength of Insulation | 1500 V dc / 1 minute      |
| Insulation Resistance Test        | Min. 5000 MΩ·Km           |
| Conductor Resistance              | Max. 28.45 Ω/100m at 20°C |
| Resistance Unbalance              | Max. 2%                   |
| Capacitance Unbalance             | Max. 220 pF/100m          |

| TECHNICAL PERFORMANCE  |                |             |               |
|------------------------|----------------|-------------|---------------|
| TIA Cat 6 Channel Test |                |             |               |
| Frequency (MHz)        | Insertion Loss | RL Min (dB) | NEXT Min (dB) |
| 1                      | 3.0            | 19.0        | 65.0          |
| 4                      | 4.0            | 19.0        | 63.0          |
| 8                      | 5.7            | 19.0        | 58.2          |
| 10                     | 6.3            | 19.0        | 56.6          |
| 16                     | 8.0            | 18.0        | 53.2          |
| 20                     | 9.0            | 17.5        | 51.6          |
| 25                     | 10.1           | 10.1        | 50.0          |
| 31.25                  | 11.4           | 16.5        | 48.4          |
| 62.25                  | 16.5           | 14.0        | 43.4          |
| 100                    | 21.3           | 12.0        | 39.9          |
| 200                    | 31.5           | 9.0         | 34.8          |
| 250                    | 35.9           | 8.0         | 33.1          |

| Frequency (MHz) | PSNEXT (dB/100m) | ACR-F (dB/100m) | PS ACR-F (dB/100m) | Impedance (Ohms) |
|-----------------|------------------|-----------------|--------------------|------------------|
| 1               | 62.0             | 63.3            | 60.3               | 100±15           |
| 4               | 60.5             | 51.2            | 48.2               |                  |
| 8               | 55.6             | 45.2            | 42.2               |                  |
| 10              | 54.0             | 43.3            | 40.3               |                  |
| 16              | 50.6             | 39.2            | 36.3               |                  |
| 20              | 59.0             | 37.2            | 34.2               |                  |
| 25              | 47.3             | 35.3            | 32.3               |                  |
| 31.25           | 45.7             | 33.4            | 30.4               |                  |
| 62.25           | 40.6             | 27.3            | 24.3               |                  |
| 100             | 37.1             | 23.3            | 20.3               |                  |
| 200             | 31.9             | 17.2            | 14.2               |                  |
| 250             | 30.2             | 15.3            | 12.3               |                  |