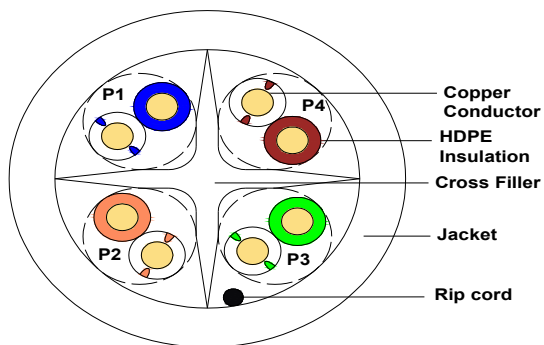


### Nominal Transmission Characteristics

| Frequency<br>(MHz) | Min.<br>RL<br>(dB) | Nom.<br>IL<br>(dB/100M) | Max.<br>DOP<br>(ns/100M) | Max.<br>SKEW<br>(ns/100M) | Min.<br>NEXT<br>(dB) | Min.<br>PSNEXT<br>(dB) | Min.<br>ACR-F<br>(dB/100M) | Min.<br>PSACR-F<br>(dB/100M) |
|--------------------|--------------------|-------------------------|--------------------------|---------------------------|----------------------|------------------------|----------------------------|------------------------------|
| 1                  | 20.0               | 2.0                     | 570                      | 45                        | 74.3                 | 72.3                   | 67.8                       | 64.8                         |
| 4                  | 23.0               | 3.8                     | 552                      | 45                        | 65.3                 | 63.3                   | 55.8                       | 52.8                         |
| 8                  | 24.5               | 5.3                     | 547                      | 45                        | 60.8                 | 58.8                   | 49.7                       | 46.7                         |
| 10                 | 25.0               | 6.0                     | 545                      | 45                        | 59.3                 | 57.3                   | 47.8                       | 44.8                         |
| 16                 | 25.0               | 7.6                     | 543                      | 45                        | 56.2                 | 54.2                   | 43.7                       | 40.7                         |
| 20                 | 25.0               | 8.5                     | 542                      | 45                        | 54.8                 | 52.8                   | 41.8                       | 38.8                         |
| 25                 | 24.3               | 9.5                     | 541                      | 45                        | 53.3                 | 51.3                   | 39.8                       | 36.8                         |
| 31.25              | 23.6               | 10.7                    | 540                      | 45                        | 51.9                 | 49.9                   | 37.9                       | 34.9                         |
| 62.5               | 21.5               | 15.4                    | 539                      | 45                        | 47.4                 | 45.4                   | 31.9                       | 28.9                         |
| 100                | 20.1               | 19.8                    | 538                      | 45                        | 44.3                 | 42.3                   | 27.8                       | 24.8                         |
| 200                | 18.0               | 29.0                    | 537                      | 45                        | 39.8                 | 37.8                   | 21.8                       | 18.8                         |
| 250                | 17.3               | 32.8                    | 536                      | 45                        | 38.3                 | 36.3                   | 19.8                       | 16.8                         |

ote: The above transmission performance for the 100M, 20 ±2 under the conditions tested



### core:

- P1: White-Blue/Blue  
P2: White-Orange/Orange  
P3: White-Green/Green  
P4: White-Brown/Brown

### PRODUCT DATA SHEET

| Type       |                    | U/UTP CAT6 4*2*23AWG LDPE |                   |
|------------|--------------------|---------------------------|-------------------|
| Structure  |                    | Structure A               |                   |
| Conductors | Structure AWG      | AWG                       | 23# (1/23)        |
|            | Material           | ----                      | Solid Bare Copper |
|            | Diameter           | mm                        | 0.56+/-0.008      |
| Insulation | Material           | ----                      | HDPE              |
|            | Diameter           | mm                        | 0.99+/-0.05       |
|            | Average Thickness  | mm                        | 0.21+/-0.05       |
| Shielding1 | Type               | ----                      | ----              |
| Assembly   | Direction          | ----                      | S                 |
|            | No. of Insulations | Pair                      | 4                 |
| Shielding2 | Material           | ----                      | ----              |
| Shielding3 | Shield             | ----                      | ----              |
| Jacket     | Material           | ----                      | LDPE              |
|            | Diameter           | mm                        | 6.3+/-0.3         |
|            | Average Thickness  | mm                        | 0.60+/-0.1        |
|            | Flame Rate         | ----                      | ----              |

### Mechanical Characteristics

- Cable under the minimum tension  $\geq 400\text{N}$
- Conductor elongation  $\geq 15\%$
- Jacket before Aging
  - Tensile Strength  $\geq 9.7\text{Mpa}$
  - Elongation  $\geq 350\%$
- Jacket After Aging
  - Tensile Strength  $\geq 75\% \times \text{Tensile Strength before Aging}$
  - Elongation  $\geq 75\% \times \text{Elongation before Aging}$

### Electrical Characteristic

- Impedance : 1-250MHz 100+/-15(Ohms)
- Rated Temperature: 75 °C
- DC Resistance Unbalance(%): Max2.5
- DC Resistance 20 °C 93.8 ( Ohms/Km)
- Pair-to- Ground Capacitance Unbalance : 330(pF/100M)
- Insulation Resistance:  $>5000\text{M}\Omega \cdot \text{Km}$
- Dielectric strength: DC 2500V 2S

| APPROVED | CHECKED | DRAWN | CUSTOMER: |       |
|----------|---------|-------|-----------|-------|
|          |         |       | ITEM NO.  | TP-49 |
|          |         |       | DRAW NO.  |       |
|          |         |       | UNIT      | mm    |
|          |         |       | SCALE     | NONE  |

### DESCRIPTION:

U/UTP CAT6 OUTDOOR INSTALLATION  
CABLE 100m (BLACK)

