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# PowerCat 6 Cable U/UTP LS0H >

Molex PowerCat 6 (C6) 4 Pair UTP cable has been designed to support high speed data transmission systems. The cable is part of the PowerCat 6 range of products that are designed to comply with the Category 6 specification.

We recommend that the full range of PowerCat 6 products are used in a system to maximize cabling performance, providing extended frequency response and enhanced bandwidth.



PowerCat 6 U/UTP LSOH Cable

#### FEATURES AND ADVANTAGES

4 pair LSOH cable

Category 6 compliant

Color coded for ease of termination

305m reel in a box

#### **SPECIFICATIONS**

#### **Commercial Standards**

EN 50173 2nd Edition, ISO/IEC 11801 2nd Edition, EIA / TIA 568.2-D IEC 60754-2, IEC 61034-2 Fire Propagation Test: UL 1581 VW1, IEC 60332.1, EN0256-2-1 Performance Characters - Category 6 EIA / TIA 568.2-D

Oxygen index > 29% (ASTM D 2863) Temperature index: 250 degC. (ASTM D 2863) Acid Gas generation: max 0.5% by weight (BS EN 50267-2-1)

**RoHS Compliant** 

#### Mechanical

| Conductor Size:                        | 23 AWG              |  |
|--|---------------------|--|
| Primary Insulation: Solid Polyethylene |                     |  |
| Nominal O.D.:                          | 1.045 + 0.02mm      |  |
| Twinning:                              | Right hand lay      |  |
| Sheath Type:                           | LS0H 332.1          |  |
| Minimal Wall:                          | 0.55mm              |  |
| Nominal O.D.:                          | 6.1mm               |  |
| Cable weight:                          | 13.6 Kgs Nominal    |  |
| NVP:                                   | 67%                 |  |
| <b>Bending Radius:</b>                 | <4 X Cable Diameter |  |
|  | (mm) at -20°C ± 1°C |  |
| Pulling Force:                         | 11.5kgs             |  |
|  |                     |  |

#### **Temperature Range**

| Installation:     | 0°C to +50°C   |
|-------------------|----------------|
| <b>Operation:</b> | -20°C to +70°C |

#### **Electrical**

| Characteristic Impedance: $100 \pm 15\Omega$ |             |  |  |  |
|--|-------------|--|--|--|
| Conductor Resistance:                        | ≤9.38Ω/100m |  |  |  |
| Mutual Capacitance:                          | <5.6nF/100m |  |  |  |
| Resistance Unbalance:                        | 5% Max      |  |  |  |
| Capacitance Unbalance:                       | 330pF/100m  |  |  |  |
| Delay Skew:                                  | <45nS       |  |  |  |

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#### **TRANSMISSION PROPERTIES**

| Frequency<br>MHz | Insertion Loss<br>dB/100m | RL<br>dB | NEXT<br>dB | PSNEXT<br>dB | ELFEXT<br>dB | PSELFEXT<br>dB | ACR<br>dB | PSACR<br>dB |
|------------------|---------------------------|----------|------------|--------------|--------------|----------------|-----------|-------------|
| 1                | 2.0                       | 20.00    | 74.30      | 72.3         | 67.8         | 64.8           | 72.3      | 70.3        |
| 4                | 3.8                       | 23.00    | 65.30      | 63.3         | 55.8         | 52.8           | 61.5      | 59.5        |
| 8                | 5.3                       | 24.50    | 60.80      | 58.8         | 49.7         | 46.7           | 55.5      | 53.5        |
| 10               | 6.0                       | 25.00    | 59.30      | 57.3         | 47.8         | 44.8           | 53.3      | 51.3        |
| 16               | 7.6                       | 25.00    | 56.20      | 54.2         | 43.7         | 40.7           | 48.6      | 46.6        |
| 20               | 8.5                       | 25.00    | 54.80      | 52.8         | 41.8         | 38.8           | 46.3      | 44.3        |
| 25               | 9.5                       | 24.30    | 53.30      | 51.3         | 39.8         | 36.8           | 43.8      | 41.8        |
| 31.25            | 10.7                      | 23.60    | 51.90      | 49.9         | 37.9         | 34.9           | 41.2      | 39.2        |
| 62.5             | 15.4                      | 21.50    | 47.40      | 45.4         | 31.9         | 28.9           | 32.0      | 30.0        |
| 100              | 19.8                      | 20.10    | 44.30      | 42.3         | 27.8         | 24.8           | 24.5      | 22.5        |
| 200              | 29.0                      | 18.00    | 39.80      | 37.8         | 21.8         | 18.8           | 10.8      | 8.8         |
| 250              | 32.8                      | 17.30    | 38.30      | 36.3         | 19.8         | 16.8           | 5.5       | 3.5         |

#### **ORDERING INFORMATION**

| Order No.    | SAP No.       | Description  |
|--------------|---------------|--|
| CAA-00267    | 0181740086    | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Violet |
| CAA-00267-BL | Consult Molex | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Blue   |
| CAA-00267-GY | Consult Molex | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Gray   |
| CAA-00267-YL | Consult Molex | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Yellow |
| CAA-00267-RD | Consult Molex | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Red    |
| CAA-00267-GR | Consult Molex | PowerCat 6 C6 Cable 305m reel in a box U/UTP LS0H 332.1 - Green  |

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