

# PowerCat 6 Cable

## U/UTP LSZH

**molex**

**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 maximise cabling performance, providing extended frequency response and enhanced bandwidth.



PowerCat 6 U/UTP LSZH Cable

### Features and Advantages

Enhanced performance 4 pair PVC cable

Category 6 compliant

Colour coded for ease of termination

305m reel in a box

### Specifications

#### REFERENCE INFORMATION

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  
RoHS Compliant

#### MECHANICAL PROPERTIES

Conductor Size: 23 AWG  
Primary Insulation: Solid Polyethylene  
Nominal O.D.: 1.045 + 0.02mm  
Twining: Right hand lay

Sheath Type: PVC & LSZH 332.1  
Minimal Wall: 0.55mm  
Nominal O.D.: 6.1mm  
Cable weight: 13.6 Kgs Nominal  
NVP: 67%

Bending Radius: <4 X Cable Diameter (mm) at  
-20°C ± 1°C

Pulling Force: 11.5kgs

#### Temperature Range

Installation: 0°C to +50°C  
Operation: -20°C to +70°C

#### ELECTRICAL CHARACTERISTICS

Characteristic Impedance: 100±15Ω  
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 MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.0	18.0	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5

### Ordering Information

Series No.	SAP No	Description
CAA-00266	Consult Molex	PowerCat 6 C6 Cable 305m reel in a box U/UTP PVC
CAA-00267	0181740086	PowerCat 6 C6 Cable 305m reel in a box U/UTP LSZH 332.1

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