DATASHEET

PowerCat 6 4 Pair Bulk Cable UTP LS0H Sheath ›

Molex PowerCat 6 4 Pair U/UTP Bulk Cable has been designed to support high speed data transmission systems such as Gigabit Ethernet. 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.

FEATURES AND ADVANTAGES

Enhanced performance 4 pair LS0H cable

Category 6 compliant

Color coded for ease of termination

RoHS compliant

SPECIFICATIONS

MECHANICAL

Conductor: 23 AWG Solid bare copper
Conductor Material:
Solid bare copper
Nom.O.D.(mm): 0.550 +/- +0.004
Insulation Material: HDPE
Diameter: 0.98±0.05mm
Sheath
Thickness: 0.55±0.05 mm
External O.D.: 6.1±0.4mm
Material: LS0H
Color: Purple
Nominal Weight: 42.5kg/km
Sheath Physical Properties:
Before Aging Tensile Strength (Mpa):
≥10.0
Elongation(%): ≥125
Aging Period (°C×hrs):
100°C×24h×7d
After Aging Tensile Strength (Mpa):
≥8.0
Elongation(%): ≥=100
Cold bend(-20±2°C×4h):
8×Cable O.D., no visible cracks
Temperature:
Operating: -20°C to +75°C
Storage: -20°C to +75°C
Installation: -10°C to +50°C

ELECTRICAL

NVP (%): 68
At 20°C:
1.0-250.0MHz Impedance (Ω):
100±15
1.0-250.0MHz Delay Skew (ns/100m):
≤45
DC Resistance (Ω/100m) max: 9.5
DC Conductor Resistance Unbalance (%) max: 5.0

COMMERCIAL STANDARDS

ISO/IEC 11801
EIA/TIA -568.2-D
IEC 60332-1
IEC 60332-3-22
AS/CA S008:2020

ENVIRONMENTAL STANDARDS

RoHS compliant

PoE

Our PowerCat 6 system is suitable for PoE applications as defined below:
IEEE 802.3bt from Type 1 to Type 4, and CISCO UPoE+

Notes:
For new installations of PoE Type 3 / Class 5 and above that wish to be eligible for the Molex 25 year Application Assurance Warranty, we require Category 6A cable to be used throughout.
To confirm your PoE / RP3 cabling design is eligible for the Molex 25 year Application Assurance Warranty, your design must be verified and validated with the Molex PoE Calculator. Read more https://www.molexces.com/poe-calculator

Molex recommends that the PoE feature on an individual switch port are power disabled prior to unplugging the associated powered Device.
Molex recommends that the full range of PowerCat 6 products be used in a system to maximize cabling and PoE performance
Details on Molex requirements for Warranty can be found at https://www.molexces.com/about-us/our-warranty/

www.molexces.com/products/copper/cat6/

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SPECIFICATIONS (CONT)

ELECTRICAL

Frequency	Return Loss	Attenuation	NEXT	Phase Delay	PS NEXT	ELFEXT	PSELFEXT
MHz	>dB	>dB	>dB	<ns	>db	>dB	>dB
1	20.00	2.03	74.30	570.00	72.30	67.80	64.80
4	23.00	3.78	65.30	552.00	63.30	55.80	52.80
8	24.50	5.32	60.80	546.73	58.80	49.70	46.70
10	25.00	5.95	59.30	545.38	57.30	47.80	44.80
16	25.00	7.55	56.20	543.00	54.20	43.70	40.70
20	25.00	8.47	54.80	542.05	52.80	41.80	38.80
25	24.30	9.51	53.30	541.20	51.30	39.80	36.80
31.25	23.60	10.67	51.90	540.44	49.90	37.90	34.90
62.5	21.50	15.38	47.70	538.55	45.40	31.90	28.90
100	20.10	19.80	44.30	537.60	42.30	27.80	24.80
200	18.00	28.98	39.80	536.54	37.80	21.80	18.80
250	17.30	32.85	38.30	536.27	36.30	19.80	16.80

ORDERING INFORMATION

Order No.	SAP No.	Description	Color
CAA-00200	182080413	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Purple
CAA-00200-BK	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Black
CAA-00200-GY	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Gray
CAA-00200-BL	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Blue
CAA-00200-YL	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Yellow

www.molexces.com/products/copper/cat6/

