



## PRODUCT SPECIFICATIONS

### CAT6-DB

- Description:** 23AWG Non-Plenum, unshielded four twisted pairs, Flooded Category 6 Horizontal Cable with a polyethylene jacket, suitable for outdoor use.
- Ratings/Approvals:** ANSI/TIA/EIA 568C.2 Category 6
- Applications:** Supports all category 6 applications including Ethernet 1BASE-TX, 100BASE-VG and 155 ATM. Particularly suited for high bandwidth application such as 622 ATM, Wideband, Ethernet 1000BASE-T and emerging applications with anticipated data rates to 3.2 Gbps.

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### CONSTRUCTION

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|--|--------------------------|
| <b>Conductor:</b>                      | 23 AWG Solid Bare Copper |
| <b>Number of Conductors or Pairs:</b>  | 4 Pair                   |
| <b>Flooding Compound:</b>              | Water Blocking Gel       |
| <b>Jacket Material:</b>                | Polyethylene             |
| <b>Nominal Overall Cable Diameter:</b> | 0.260 in.                |

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### ELECTRICAL & PHYSICAL PROPERTIES

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|----------------------------------|--|
| <b>Temperature Rating:</b>       | Installation: 0°C to 60°C<br>Operation: -60°C to 60°C  |
| <b>Velocity of Propagation:</b>  | 70%  |
| <b>Mutual Capacitance:</b>       | 14 pF/ft Nominal   |
| <b>Capacitance Unbalance:</b>    | 330 pF/ft maximum  |
| <b>Maximum Conductor D.C.R.:</b> | 28.6Ω/1,000 ft   |
| <b>Maximum D.C.R. Unbalance:</b> | 3%   |
| <b>Maximum Delay Skew:</b>       | 18 ns/100m   |
| <b>Characteristic Impedance:</b> | From 0.772 MHz - 100 MHz 100 ± 15%<br>From 101 MHz - 250 MHz 100 ± 22%   |
| <b>Maximum Operating Voltage</b> | 300 VRMS   |
| <b>Minimum Bend Radius:</b>      | 1.0 in.  |
| <b>Insulation Colors:</b>        | Blue paired with White/Blue<br>Orange paired with White/Orange<br>Green paired with White/Green<br>Brown paired with White/Brown |

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### ELECTRICAL CHARACTERISTICS

| Frequency | Return Loss | Insertion Loss | NEXT     | PS-NEXT  | ELFEXT   | PS-ELFEXT | ACR      | PS-ACR   |
|-----------|-------------|----------------|----------|----------|----------|-----------|----------|----------|
| MHz       | dB(100M)    | dB(100M)       | dB(100M) | dB(100M) | dB(100M) | dB(100M)  | dB(100M) | dB(100M) |
|           | Minimum     | Maximum        | Minimum  | Minimum  | Minimum  | Minimum   | Minimum  | Minimum  |
| 1         | 20.0        | 2.0            | 80.3     | 78.3     | 73.8     | 70.8      | 78.3     | 76.3     |
| 4         | 23.0        | 3.8            | 71.3     | 69.3     | 61.8     | 58.8      | 67.5     | 65.5     |
| 10        | 25.0        | 6.0            | 65.3     | 63.3     | 53.8     | 50.8      | 59.3     | 57.3     |
| 16        | 25.0        | 7.6            | 62.2     | 60.2     | 49.7     | 46.7      | 54.6     | 52.6     |
| 20        | 25.0        | 8.5            | 60.8     | 58.8     | 47.8     | 44.8      | 52.3     | 50.3     |
| 31.25     | 23.6        | 10.7           | 57.9     | 55.9     | 43.9     | 40.9      | 47.2     | 45.2     |
| 62.5      | 21.5        | 15.4           | 53.4     | 51.4     | 37.9     | 34.9      | 38.0     | 36.0     |
| 100       | 20.1        | 19.8           | 50.3     | 48.3     | 33.8     | 30.8      | 30.5     | 28.5     |
| 200       | 18.0        | 29.0           | 45.8     | 43.8     | 27.8     | 24.8      | 16.8     | 14.9     |
| 250       | 17.3        | 32.8           | 44.3     | 42.3     | 25.8     | 22.8      | 11.5     | 9.5      |