



For more Information
please call

1-800-Belden1



General Description:

CAT6 Performance Patch Cord UTP, 4 Pair, 28 AWG Stranded, CMR, T568A/B-T568A/B, (See Product Family List for colors & lengths)

Usage (Overall)

Suitable Applications: TIA Category 6, ISO Class E, 1000BASE-T, Support Power over Ethernet (up to 100W), Cisco UPOE (up to 60W) and Power over HDBase-T (up to 100W)

Related Parts: CAT6+ Modular Jacks, CAT6+ RJ45 Couplers, CAT6+ Patch Panels

Multi Conductor

Physical Characteristics

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 4 | 28 | Stranded | Tinned Copper |

Insulation

Insulation Material:

| Insulation Material |
|---------------------|
| PE - Polyethylene |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Overall Diameter

Overall Nominal Diameter: 3.810 mm

Cable Characteristics (Connectivity)

Outer Jacket

Outer Jacket Color Code Chart:

| Color |
|--------------------|
| See Product Family |

Physical Characteristics (Connectivity)

Materials

Materials:

| Description | Type | Material |
|------------------|--------|--|
| Plug | RJ45 | Polycarbonate - UL94V-0 |
| Boot | | Polycarbonate - UL94V-0 |
| Front Connection | Blades | Phosphor Bronze with 50u inch Gold over Nickel Plating |

Color

Boot Color: Translucent

Wiring Scheme

Wiring Scheme: T568A/B-T568A/B

Packaging

Packaging: Individually packaged in a clear plastic bag.

Mechanical Characteristics (Connectivity)

Plug / Jack Compatibility: RJ45

Termination Interface:

| Termination | Connection | Durabilities |
|-------------|------------------|--------------|
| RJ45 | Mated Connection | 750 Cycles |

Storage Temperature Range: -40°C To +75°C

Installation Temperature Range: 0°C To +60°C

Operating Temperature Range: -20°C To +75°C

Max. Recommended Pull Tension: 50.042 N

Min. Bend Radius (Overall Cable): 14.732 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

UL Rating: Riser

IEEE Specification: IEEE 802.3at Type 1 and Type 2 (up to 30W), IEEE 802.3bt Type 3 and Type 4 (up to 100W)

Other Standards: FCC Part 68, Subpart F, IEC 60603-7

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2006

MII Order #39 (China RoHS): EUP 50

Telecommunications Standards: ISO/IEC 11801:2002 Ed.2, TIA 568.2-D

Safety Listing: c(UL)us Listed

Other Specification: CEC/C(UL) Voltage Rating: 300 V RMS

Suitability

Suitability - Indoor: Yes

Transmission Characteristics (Connectivity)

Performance Table 1:

| Frequency (MHz) | Max. Insertion Loss TIA* (dB) | Max. Insertion Loss Belden (dB) | Min. PSNEXT TIA* (dB) | Min. PSNEXT Belden (dB) | Min. PSACRF TIA* (dB) | Min. PSACRF Belden (dB) |
|-----------------|-------------------------------|---------------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| 1.000 | 2.400 | 3.800 | 72.300 | 72.300 | 64.800 | 64.800 |
| 4.000 | 4.500 | 7.200 | 63.300 | 63.300 | 52.800 | 52.700 |
| 8.000 | 6.400 | 10.100 | 58.800 | 58.800 | 46.700 | 46.700 |
| 10.000 | 7.100 | 11.300 | 57.300 | 57.300 | 44.800 | 44.800 |
| 16.000 | 9.100 | 14.400 | 54.200 | 54.300 | 40.700 | 40.700 |

C6D110000 Cable Assemblies - CAT6 Performance Modular Cord

| | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|
| 20.000 | 10.200 | 16.100 | 52.800 | 52.800 | 38.800 | 38.700 |
| 25.000 | 11.400 | 18.100 | 51.300 | 51.300 | 36.800 | 36.800 |
| 31.250 | 12.800 | 20.300 | 49.900 | 49.900 | 34.900 | 34.900 |
| 62.500 | 18.500 | 29.200 | 45.400 | 45.400 | 28.900 | 28.800 |
| 100.000 | 23.800 | 37.600 | 42.300 | 42.300 | 24.800 | 24.800 |
| 200.000 | 34.800 | 55.100 | 37.800 | 37.800 | 18.800 | 18.700 |
| 250.000 | 39.400 | 62.400 | 36.300 | 36.300 | 16.800 | 16.800 |

Performance Table - Footnote: 100 Meter Cable Specifications - * TIA-EIA-568.2-D Category 6 Standard
 ----- PSACRF is formally PSELFEXT

Performance Table 2:

| Frequency (MHz) | Min. Return Loss TIA* (dB) | Min. Return Loss Belden (dB) | Min. Balanced TCL TIA* (dB) | Min. Balanced TCL Belden (dB) |
|-----------------|----------------------------|------------------------------|-----------------------------|-------------------------------|
| 1.000 | 20.000 | 20.000 | 40.000 | 40.000 |
| 4.000 | 23.000 | 23.000 | 40.000 | 40.000 |
| 8.000 | 24.500 | 24.500 | 40.000 | 40.000 |
| 10.000 | 25.000 | 25.000 | 40.000 | 40.000 |
| 16.000 | 25.000 | 25.000 | 38.000 | 38.000 |
| 20.000 | 25.000 | 25.000 | 37.000 | 37.000 |
| 25.000 | 24.200 | 24.300 | 36.000 | 36.000 |
| 31.250 | 23.300 | 23.600 | 35.100 | 35.100 |
| 62.500 | 20.700 | 21.500 | 32.000 | 32.000 |
| 100.000 | 19.000 | 20.100 | 30.000 | 30.000 |
| 200.000 | 16.400 | 18.000 | 27.000 | 27.000 |
| 250.000 | 15.600 | 17.300 | 26.000 | 26.000 |

Dielectric Strength: 1,000 V RMS @ 60 Hz for 1 minute

Current Rating: 1.500 A

Insulation Resistance: 500 M-Ohm Minimum

Max. Contact Resistance: 20 m-Ohm

Electrical Characteristics (Overall)

Labeling

Labeling: Labeling: Belden Part Number and Cord Length.

Notes (Overall)

- Notes:**
- C6D1100000 is subdivided as following C6-D1-1-00-000
 C6 stands for performance, D1 stands for cable type, 1 stands for termination type, 00 stands for color, 000 stands for length Use last 3 digits of the code to specify length in feet - 001-015 ft in increments of 1 ft than 20 ft or 25 ft. xxx stands for special required length.
 - 28 AWG stranded conductors are not TIA-568 compliant. However, using maximum 6.3 meters of cordage connected to a 90 meters permanent link will meet all TIA channel requirements.

- Notes (Cont'd.):**
- Cable weight: 0.012 Lbs/ft.
 - www.belden.com/p

Product Family

Product List:

| Length | Black | Red | Yellow | Green | Blue | Gray | White |
|----------------|------------|------------|------------|------------|------------|------------|------------|
| 2 ft. (0.6 m) | C6D1100002 | C6D1102002 | C6D1104002 | C6D1105002 | C6D1106002 | C6D1108002 | C6D1109002 |
| 3 ft. (0.9 m) | C6D1100003 | C6D1102003 | C6D1104003 | C6D1105003 | C6D1106003 | C6D1108003 | C6D1109003 |
| 4 ft. (1.2 m) | C6D1100004 | C6D1102004 | C6D1104004 | C6D1105004 | C6D1106004 | C6D1108004 | C6D1109004 |
| 5 ft. (1.5 m) | C6D1100005 | C6D1102005 | C6D1104005 | C6D1105005 | C6D1106005 | C6D1108005 | C6D1109005 |
| 6 ft. (1.8 m) | C6D1100006 | C6D1102006 | C6D1104006 | C6D1105006 | C6D1106006 | C6D1108006 | C6D1109006 |
| 7 ft. (2.1 m) | C6D1100007 | C6D1102007 | C6D1104007 | C6D1105007 | C6D1106007 | C6D1108007 | C6D1109007 |
| 8 ft. (2.4 m) | C6D1100008 | C6D1102008 | C6D1104008 | C6D1105008 | C6D1106008 | C6D1108008 | C6D1109008 |
| 9 ft. (2.7 m) | C6D1100009 | C6D1102009 | C6D1104009 | C6D1105009 | C6D1106009 | C6D1108009 | C6D1109009 |
| 10 ft. (3.0 m) | C6D1100010 | C6D1102010 | C6D1104010 | C6D1105010 | C6D1106010 | C6D1108010 | C6D1109010 |
| 12 ft. (3.6 m) | C6D1100012 | C6D1102012 | C6D1104012 | C6D1105012 | C6D1106012 | C6D1108012 | C6D1109012 |
| 15 ft. (4.6 m) | C6D1100015 | C6D1102015 | C6D1104015 | C6D1105015 | C6D1106015 | C6D1108015 | C6D1109015 |

METRIC MEASUREMENT VERSION

C6D110000 Cable Assemblies - CAT6 Performance Modular Cord

| | | | | | | | |
|----------------|------------|------------|------------|------------|------------|------------|------------|
| 25 ft. (7.6 m) | C6D1100025 | C6D1102025 | C6D1104025 | C6D1105025 | C6D1106025 | C6D1108025 | C6D1109025 |
|----------------|------------|------------|------------|------------|------------|------------|------------|

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------|-------|-------------|-------|-------|-----------|
|--------|-------|-------------|-------|-------|-----------|

Revision Number: 0 Revision Date: 02-06-2020

© 2020 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.