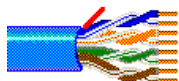


7813LC Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable



For more Information
please call

1-800-Belden1



General Description:

CAT6 (250MHz), 4-Bonded-Pairs, U/UTP-Unshielded, Limited Combustible-FHC 25/50, Plenum-CMP, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, FEP Insulation, Central Filler, FEP Jacket

Usage (Overall)

Suitable Applications:

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz Category 6, Environments benefitting from Limited Combustible Cable

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

Total Number of Conductors:

8

Insulation

Insulation Material:

Insulation Material
FEP - Fluorinated Ethylene Propylene

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Teflon	FEP - Fluorinated Ethylene Propylene

Outer Jacket Diameter:

Nom. Dia. (in.)
0.214

Overall Cable

Overall Cabling Separator Material:

Central Filler

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +150°C

Bulk Cable Weight: 28 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 0.500 in.

Min. Bend/Installation: 2.100 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC(UL) Specification: CMP, FHC 25/50

NEC Articles: 800

7813LC Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable

CEG/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class E
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 6 - TIA 568.C.2
Other Specification:	6

Applicable Patents:

Country	Patent
US	5734126

Flame Test

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6), UL723 (NFPA 255)
C(UL) Flame Test:	FT6
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	2412

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)
72

Maximum Delay:

Delay (ns/100 m)
537 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)
45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
8.2

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
5

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.0	74.3	72.3	72.3	70.3	20.0	na
4	3.8	65.3	63.3	61.5	59.5	23.0	na
8	5.3	60.8	58.8	55.4	53.4	24.5	na
10	6.0	59.3	57.3	53.3	51.3	25.0	na
16	7.6	56.2	54.3	48.7	46.7	25.0	na
20	8.5	54.8	52.8	46.3	44.3	25.0	na
25	9.5	53.3	51.3	43.8	41.8	24.3	na

7813LC Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable

31.25	10.7	51.9	49.9	41.2	39.2	23.6	na
62.5	15.4	47.4	45.4	32.0	30.0	21.5	na
100	19.8	44.3	42.3	24.5	22.5	20.1	na
155	25.2	41.5	39.5	16.3	14.3	18.8	na
200	29.0	39.8	37.8	10.8	8.8	18.0	na
250	32.8	38.3	36.3	5.5	3.5	17.3	na

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.8
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 22	100 ± 15	23.9	20.9
200	100 ± 22	100 ± 15	21.8	18.8
250	100 ± 32	100 ± 15	19.8	16.8

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 6.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7813LC 006U1000	1,000 FT	34.000 LB	BLUE, LIGHT		CAT6 4PRB U/UTP LC BOX
7813LC 006I000	1,000 FT	37.000 LB	BLUE, LIGHT	C	CAT6 4PRB U/UTP LC REEL
7813LC 009U1000	1,000 FT	34.000 LB	WHITE		CAT6 4PRB U/UTP LC BOX
7813LC 009I000	1,000 FT	37.000 LB	WHITE	C	CAT6 4PRB U/UTP LC REEL

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 6 Revision Date: 02-24-2014

© 2017 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).