



Product: <u>7814A</u> ☑

CAT 6 4P 24AWG, U/UTP, PVC Jkt, Indoor,CM

Product Description

CAT 6 4PR x 24AWG, Solid Bare Copper Conductor, U/UTP, PE Insulation, CM,PVC Jacket, Indoor

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video,
Suitable Applications.	RS-422, 250MHz Category 6

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	0.97 mm (0.038 in)	Blue & White with Blue Stripe, Orange & White with Orange Stripe, Green & White with Green Stripe, Brown & White with Brown Stripe

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	5.8 mm (0.23 in)	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance	
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm	

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	538 ns/100m	45 ns/100m	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.0 dB/100m	74.3	72.3	72.3	70.3	67.8	64.8	20.0	40.0	35.0
4	3.8 dB/100m	65.3	63.3	61.5	59.5	55.8	52.8	23.0	40.0	23.0
8	5.3 dB/100m	60.8	58.8	55.5	54.5	49.7	46.7	24.5	40.0	16.9
10	6.0 dB/100m	59.3	57.3	53.3	50.3	47.8	44.8	25.0	40.0	15.0
16	7.6 dB/100m	56.2	54.2	48.7	46.7	43.7	40.7	25.0	38.0	10.9
20	8.5 dB/100m	54.8	52.8	46.3	44.3	41.8	38.8	25.0	37.0	9.0
25	9.5 dB/100m	53.3	51.3	43.8	41.8	39.8	36.8	24.3	36.0	7.0
31.25	10.7 dB/100m	51.9	49.9	41.4	39.4	37.9	34.9	23.6	35.1	
62.5	15.4 dB/100m	47.4	45.4	32.0	30.0	31.9	28.9	21.5	32.0	
100	19.8 dB/100m	44.3	42.3	24.5	22.5	27.8	24.8	20.1	30.0	
200	29.0 dB/100m	39.8	37.8	10.8	8.8	21.8	18.8	18.0	27.0	

250	32.8 dB/100m		38.3	36.3	5.5	3.5	19.8	16.8	17.3	26.0	
Table Notes: Third p		Third party	verified to TIA	568.2-D, Categor	y 6. Typical V	alues are for ref	erence only				

Mechanical Characteristics

Temperature

Operating -20°C to +75°C

Bend Radius

Installation Min. 23.2 mm (0.913 in)

 Max. Pull Tension:
 110 N (25 lbf)

 Bulk Cable Weight:
 36.0 kg/km (24.2 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Indoor
Flammability / Reaction to Fire:	UL1685
NEC / UL Compliance:	СМ
CEC / C(UL) Compliance:	CM
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Jacket sequentially marked		
--------	----------------------------	--	--

History

Update and Revision:	Revision Number: 0.49 Revision Date: 12-12-2023
•	

Part Numbers

Variants

Item #	Color	Putup Type	Length
7814A 010A1000	Black	Reel in Box	1,000 ft
7814A 010U1000	Black	Box	1,000 ft
7814A 006A1000	Blue	Reel in Box	1,000 ft
7814A 006U1000	Blue	Box	1,000 ft
7814A 005A1000	Green	Reel in Box	1,000 ft
7814A 005U1000	Green	Box	1,000 ft
7814A 008A1000	Grey	Reel in Box	1,000 ft
7814A 008U1000	Grey	Box	1,000 ft
7814A 003A1000	Orange	Reel in Box	1,000 ft
7814A 003U1000	Orange	Box	1,000 ft
7814A 002A1000	Red	Reel in Box	1,000 ft
7814A 002U1000	Red	Box	1,000 ft
7814A 007A1000	Violet	Reel in Box	1,000 ft
7814A 007U1000	Violet	Box	1,000 ft
7814A 009A1000	White	Reel in Box	1,000 ft
7814A 009U1000	White	Box	1,000 ft
7814A 004A1000	Yellow	Reel in Box	1,000 ft
7814A 004U1000	Yellow	Box	1,000 ft

© 2024 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.