



# 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, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6
Construction Details	
Conductor	

#### Conductor

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

#### Insulation

	Material	Nom. Insulation Diameter	Color Code
ľ	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 party		Third party v	verified to TIA	568.2-D, Categor	y 6. Typical V	alues are for refe	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)

#### **Standards and Compliance**

36.0 kg/km (24.2 lbs/1000ft)

Bulk Cable Weight:

Environmental Suitability:	Indoor, Indoor
Flammability / Reaction to Fire:	UL1685
NEC / UL Compliance:	СМ
CEC / C(UL) Compliance:	СМ
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	

#### roduct Notes

Notes:	Notes: Jacket sequentially marked					
History						
Update and Revision:	Revision Number: 0.51 Revision Date: 04-29-2024					

#### **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

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