

## 219567-X Cut Sheet

Category 6 UTP Cable, 4-Pair, CMP (Plenum Rated)



### Part Number Information

Detail	Data
<b>Description</b>	Cable
<b>Category</b>	Category 6
<b>UL/NEC Rating</b>	CMP (Plenum Rated)
<b>Pair Count</b>	4-Pair
<b>Shielding</b>	UTP
Variation Description	Jacket Color and Packaging
<b>219567-1</b>	White, 1000ft Wooden Reel
<b>219567-2</b>	White, 1000ft Reel-in-a-Box
<b>219567-3</b>	Gray, 1000ft Wooden Reel
<b>219567-4</b>	Gray, 1000ft Reel-in-a-Box
<b>219567-5</b>	Blue, 1000ft Wooden Reel
<b>219567-6</b>	Blue, 1000ft Reel-in-a-Box
<b>219567-7</b>	Yellow, 1000ft Wooden Reel
<b>219567-8</b>	Yellow, 1000ft Reel-in-a-Box
<b>1-219567-0</b>	CAT6,4UTP,23AWG,CMP,1M,ORG RB
<b>1-219567-4</b>	Green, 1000ft Reel-in-a-Box
<b>6-219567-1</b>	White, 3000ft Wooden Reel
<b>6-219567-3</b>	Gray, 3000ft Wooden Reel
<b>6-219567-5</b>	Blue, 3000ft Wooden Reel
<b>6-219567-7</b>	Yellow, 3000ft Wooden Reel
<b>6-219567-9</b>	Green, 3000ft Wooden Reel

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### Category 6 UTP Cable, 4-Pair, CMP (Plenum Rated)

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#### Description

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AMP NETCONNECT Category 6 cables exceed TIA/EIA-568-B.2-1 Category 6 and ISO/IEC 11801 Class E performance requirements by significant margins on all parameters. The AMP NETCONNECT Category 6 System complies with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video and analog and digital voice (VoIP).

AMP NETCONNECT Category 6 UTP cables are available in both plenum and non-plenum, with standard colors including white, gray, blue and yellow. Category 6 Cables from AMP NETCONNECT feature lead-free jacketing. Packaging is either on bulk reels or in a reel-in-box, with standard put-ups being 1000ft splice-free lengths.

#### Specification

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Horizontal cabling shall be 23 AWG, 4-pair UTP, NEC/NFPA CMP rated and be independently verified for compliance. Cable jacketing shall be **[white, gray, blue or yellow]** and shall be lead-free. Individual conductors shall be 100% virgin FEP insulated. Cable shall exceed all TIA/EIA and ISO Category 6/Class E requirements as well as meet the performance requirements listed in the following table:

**[include Performance Characteristics tables from below]**

Cable performance shall be independently verified and characterized to 600 MHz. Cable shall be supplied [on wooden reels or in a reel-in-box]. Independent verification for flammability compliance shall be to NEC article 800 and NFPA 70; CMP ( NFPA 262, UL 910). Horizontal cable shall be AMP NETCONNECT part number 219567-X.

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### Category 6 UTP Cable, 4-Pair, CMP (Plenum Rated)

#### Performance Data

Table 1 – Performance Characteristics (meet or exceed TIA/EIA-568-B.2-1 Category 6 requirements)

Frequency (MHz)	Insertion Loss (Attenuation) dB/100m			NEXT (dB)			PSNEXT (dB)			ELFEXT (dB)		
	Standard	Cat6 CMP		Standard	Cat6 CMP		Standard	Cat6 CMP		Standard	Cat6 CMP	
		Max.	Typical		Min.	Typical		Min.	Typical		Min.	Typical
0.772	1.8	1.6	1.5	76.0	86.0	93.0	74.0	83.0	85.9	70.0	82.9	86.4
1	2.0	1.8	1.7	74.3	85.0	92.0	72.3	82.7	85.8	67.8	74.2	84.3
4	3.8	3.5	3.4	65.3	73.0	82.0	63.3	71.8	75.8	55.8	62.2	73.1
8	5.3	4.9	4.8	60.8	72.0	81.0	58.8	71.7	74.5	49.7	57.2	67.8
10	6.0	5.6	5.4	59.3	71.0	76.0	57.3	69.0	70.4	47.8	55.2	65.3
16	7.6	7.1	6.9	56.2	70.0	75.0	54.2	60.1	64.3	43.7	51.1	62.7
20	8.5	7.9	7.7	54.8	66.0	68.0	52.8	63.1	65.0	41.8	49.7	61.2
25	9.5	8.4	8.7	53.3	59.0	66.0	51.3	57.7	60.6	39.8	48.3	62.6
31.25	10.7	9.9	9.8	51.9	59.0	69.0	49.9	57.2	61.5	37.9	47.4	61.6
62.5	15.4	14.4	14.3	47.4	57.0	65.0	45.4	53.4	56.8	31.9	43.7	50.9
100	19.8	18.8	18.5	44.3	55.0	60.0	42.3	49.7	51.5	27.8	40.0	45.0
200	29.0	27.9	27.5	39.8	53.0	56.0	37.8	49.8	51.3	21.8	33.0	37.8
250	32.8	31.8	31.3	38.3	52.0	56.0	36.3	49.5	50.7	19.8	28.5	38.3
300	36.4	35.5	34.9	37.1	48.0	55.0	35.1	46.3	48.2	18.3	28.0	35.9
350	39.8	38.9	36.3	36.1	45.0	52.0	34.1	43.5	45.1	16.9	23.7	33.7
400	43.0	41.1	39.6	35.3	42.0	49.0	33.3	40.9	44.2	15.8	20.1	32.3
500	48.9	48.6	45.4	33.8	41.0	46.0	31.8	39.2	42.0	13.8	10.9	20.9
550	51.8	51.7	48.3	33.2	40.0	43.0	31.2	36.9	40.6	13.0	7.6	16.8
600	54.5	54.5	50.8	32.6	37.0	35.0	30.6	34.8	43.0	12.2	4.1	17.2

Table 2 – Performance Characteristics (meet or exceed TIA/EIA-568-B.2-1 Category 6 requirements)

Frequency (MHz)	PSELFEXT (dB)			RL (dB)			ACR (dB)			PSACR (dB)		
	Standard	Cat6 CMP		Standard	Cat6 CMP		Standard	Cat6 CMP		Standard	Cat6 CMP	
		Min.	Typical		Min.	Typical		Min.	Typical		Min.	Typical
0.772	67.0	75.4	81.1	-	25.0	26.0	74.2	84.5	91.5	72.2	81.5	84.4
1	64.8	73.2	78.1	20.0	29.0	30.0	72.3	83.2	90.3	70.3	80.9	84.1
4	52.8	61.3	71.2	23.0	29.0	33.0	61.5	69.5	78.6	59.5	68.3	72.4
8	46.7	56.3	66.1	24.5	35.0	32.0	55.5	67.1	76.2	53.5	66.8	69.7
10	44.8	54.3	64.1	25.0	32.0	34.0	53.3	65.4	70.6	51.3	63.4	65.0
16	40.7	50.1	60.4	25.0	35.0	36.0	48.6	63.0	68.1	46.6	53.0	57.4
20	38.8	48.6	58.1	25.0	34.0	35.0	46.3	58.1	60.3	44.3	55.3	57.3
25	36.8	47.2	56.9	24.3	32.0	35.0	43.8	50.6	57.3	41.8	49.3	51.9
31.25	34.9	45.9	55.9	23.6	35.0	38.0	41.2	49.1	59.2	39.2	47.3	51.7
62.5	28.9	42.8	49.8	21.5	32.0	35.0	32.0	42.6	50.7	30.0	39.0	42.5
100	24.8	39.4	43.3	20.1	35.0	36.0	24.5	36.2	41.5	22.5	30.9	33.0
200	18.8	31.5	36.7	18.0	23.0	33.0	10.8	25.1	28.5	8.8	21.9	23.8
250	16.8	28.4	37.1	17.3	26.0	29.0	5.5	20.2	24.7	3.5	17.7	19.4
300	15.3	28.8	37.1	16.8	25.0	32.0	0.7	12.5	20.1	-1.3	10.8	13.3
350	13.9	22.8	34.9	16.3	26.0	30.0	-3.7	6.1	15.7	-5.7	4.6	8.8
400	12.8	18.9	20.9	15.9	24.0	27.0	-7.7	0.9	9.4	-9.7	-0.2	4.6
500	10.8	10.7	14.9	15.2	24.0	27.0	-15.1	-7.6	0.6	-17.1	-9.4	-3.4
550	10.0	6.5	9.0	14.9	23.0	26.0	-18.6	-11.7	-5.3	-20.6	-14.8	-7.7
600	9.2	5.0	8.7	14.7	21.0	24.0	-21.9	-17.5	-15.8	-23.9	-19.7	-7.8

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**Category 6 UTP Cable, 4-Pair, CMP (Plenum Rated)****Technical Data**

<b>Detail</b>	<b>Data</b>
<b>Mutual Capacitance</b>	5.6nF/100m nominal
<b>Characteristic Impedance</b>	100Ω ±15%, 1 - 600MHZ
<b>Conductor DC Resistance</b>	66.58Ω/km maximum
<b>Voltage</b>	300VAC or VDC
<b>Delay Skew</b>	45ns
<b>Propagation Delay</b>	536ns/100m @ 250MHz
<b>Nominal Velocity of Propagation</b>	72%
<b>Operating Temperature</b>	-20° C – 60° C (-4° F – 140° F)
<b>Storage Temperature</b>	-20° C – 80° C (-4° F – 176° F)
<b>Bend Radius</b>	(4 × cable diameter) ≈ 1"
<b>Packaging</b>	1000ft Reel-in-a-Box - 24 lbs/kft
<b>Packaging</b>	1000ft Wooden Reel - 24 lbs/kft
<b>Material</b>	Conductors – 23 AWG, Solid Copper, (Ø.0226 nominal)
<b>Material</b>	Insulation – 0.0087in (Ø.040 nominal), FEP (fluoropolymer)
<b>Material</b>	Jacket – 0.015in nominal (Ø.230 nominal), FR PVC
<b>Approvals</b>	Safety – ETL LISTED for safety to CMP – (NFPA 262, UL 910)
<b>Approvals</b>	Performance – ETL Verified to TIA/EIA-568-B.2-1 "Performance Specifications for 4-Pair 100 Ohm Category 6 Cabling"

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