

CAT6 23AWG/4PAIR CMR 600MHz U/UTP

PART NO. 6CMR234BX

DESCRIPTION

- 23 AWG 4 Pair U/UTP Category 6 cable tested to 600Mhz premium grade, high performance for top level network cabling for maximum headroom and bandwidth. Available in Pull Box for easier installation.

FEATURES AND BENEFITS

- Cross separator design engineered for consistent electrical performance.
- Improved cable temperature rating (75°C Riser) for greater protection against increased operating temperatures.
- Sequential footage markings
- Verified by third-party for guaranteed performance

APPLICATIONS

- IEEE 802.3 1000Base-T, 100Base-Tx
10Base-T, PoE, PoE+
- ANSI/TIA 854: 1000Base-TX
- CDDI, Token Ring, ATM
- Digital Video
- Broadband and Baseband Analog Video

STANDARD COMPLIANCES

- ANSI/TIA 568-C.2
- ANSI/TIA 862 (Building Automation)
- ISO/IEC 11801 Ed. 2.0 (Class EI)
- ICEA 8-102-700 (Category 6 or 5E)
- REACH Compliant
- CPR Compliant (Fully Complies to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG



PHYSICAL PROPERTIES

Conductor	Material	Solid Bare Copper	
	Diameter (mm)	0.550	
Insulation	Material	HDPE	
	Average Thickness (mm)	0.22	
	Insulation Dia. (±0.05mm)	0.98	
	Minimum point Thickness (mm)	0.17	
Construction		CMR/Non-Plenum	
Twisting Lay Length		30 Underneath	
Cabling Lay Length (±20mm)		100	
	Jacket	Material	FR - PVC
		Average Thickness (mm)	0.55
		Minimum Point Thickness (mm)	0.43
Outer Diameter (±0.5mm)	6.0		
Rip Cord		Yes	
Put/UPS	Length	1000ft + 4ft	
	Weight	29 lbs/Pull Box	
Voltage Rating (Max)		DC 300V	
Flame Test Method		CMR	



ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz characteristic impedance (ohms)		100±15
1.0 - 250.0MHz Delay Skew (ns/100m)		≤45
Pair-to-Ground Capacitance Unbalance (pF/100m)		≤330
Max. Conductor DC Resistance 20°C (ohms/100m)		9.38
Resistance Unbalance (%)		≤5
Before Aging	Tensile Strength (Mpa)	≥13.8
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥85% of unaged
	Elongation (%)	≥50% of unaged
Aging Condition (xhrs)		100x240
Cold Bend (-20±2°Cx4hrs)		No Crack
Temperature Range		-20°C ~ 75°C



1000' Pull Box
Weight: 29 lbs.

AVAILABLE CATEGORY 6 (PART NUMBERS)

PVC	Plenum	Shielded	Shielded Plenum	Direct Burial	Shielded Direct Burial
6CMR244Bx	6CMP234Bx	6SHDCMRRx	6SHDCMPRx	6OUT234RB	6OUTGSHDRB
6CMR234Bx				6OUTG234RB	6OUTWSHDRB
				6OUTW234RB	
				6OUTA234RB	

All values in this specification are nominal and are subjective to tolerances of +/- 10 to 15%.

It is the sole responsibility of the user to have the most current specification. Specifications are subject to change without notice*

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www.commoditycables.com



ELECTRICAL PERFORMANCE

ACRF - Attenuation to Crosstalk Ratio - Far End (dB/100m)

NEXT - Near End Crosstalk (dB/100m)

ACR - Attenuation to Crosstalk Ratio (dB/100m)

PSNEXT - Power Sum Near End Crosstalk (dB/100m)

ELFEXT - Equal Level Far End Crosstalk (dB/100m)

PSELFEXT - Power Sum Equal Level Far End Crosstalk (dB/100m)

RL - Return Loss (dB)

TCL - Transverse Conversion Loss (dB/100m)

ATT - Attenuation (dB/100m)

FREQUENCY (MHz)	ATT (dB/100m)	RL (dB)	ACR (dB)	Next (dB)	PSNEXT (dB)	TCL (dB/100m)	PHASE DELAY	ELFEXT (dB/100m)	PSELFEXT dB/100m)
0.772	1.8	20	74.2	76.0	74.0	40.0	-	-	-
1	2.0	21	72.3	74.3	72.3	40.0	570.0	67.8	64.8
4	3.8	23.4	61.5	65.3	63.3	40.0	552.0	55.7	52.8
8	5.3	24.6	55.4	60.8	58.8	40.0	546.7	49.7	46.7
10	6.0	25	53.3	59.3	57.3	40.0	545.4	47.8	44.8
16	7.6	25	48.6	56.2	54.2	38.0	543.0	43.7	40.7
20	8.5	25	46.2	54.8	52.8	37.0	542.1	41.7	38.8
25	9.5	24.3	43.7	53.3	51.3	36.0	541.2	39.8	36.8
31.25	10.7	23.6	41.1	51.9	49.9	35.1	540.4	37.9	34.8
62.5	15.7	21.5	31.7	47.4	45.4	32.0	538.6	31.8	28.9
100	19.8	20.1	24.1	44.3	42.3	30.0	537.6	27.8	24.8
200	29.0	18	10.0	39.8	37.8	27.0	536.5	21.8	18.8
250	32.8	17.3	4.6	38.3	36.3	26.0	536.3	19.8	16.8
300	36.4	16.8	0.7	37.1	35.1	-	536.1	18.3	15.3
350	39.8	16.3	-	36.1	34.1	-	535.9	16.9	13.9
400	43.0	15.9	-	35.3	33.3	-	535.8	15.8	12.8
500	48.9	15.2	-	33.8	31.8	-	535.6	13.8	10.8
550	51.8	14.9	-	33.2	31.2	-	535.5	13.0	10.0
600	54.2	14.7	-	32.9	30.9	-	535.4	12.2	9.2

Electrical performance with frequency over 250MHz is only for reference

AVAILABLE JACKET COLORS

STANDARD	BLUE	WHITE	GRAY
	BLACK	RED	GREEN
	YELLOW	ORANGE	PURPLE
	PINK		
	SPECIAL	Per Customer Request*	
INSULATION COLORS			
PAIR 1	BLUE		WHITE
PAIR 2	ORANGE		WHITE
PAIR 3	GREEN		WHITE
PAIR 4	BROWN		WHITE

JACKETS ABBREVIATION

Black	B	Last alphabetical character of each part number indicates the color code that the Jacket is available in. For example Part # 6CMR244Bx ("x" indicates all the colors to the left are available for this product.
White	W	
Gray	G	
Blue	O	
Yellow	Y	
Green	V	
Orange	OR	
Purple	P	
Red	R	
Pink	PI	

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