

CAT6 24AWG/4PAIR CMR 250MHz U/UTP

PART NO. 6CMR244BX

DESCRIPTION

- 24 AWG 4 Pair U/UTP Category 6 cable tested to 250MHz, TIA minimum compliance. Available in Pull Box for easier installation.

FEATURES AND BENEFITS

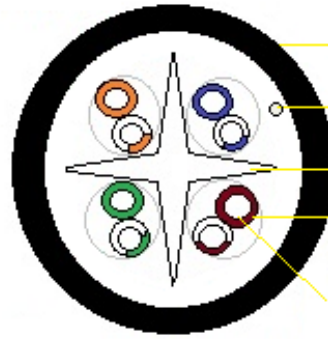
- Innovative cross-web design allowing for maximum pair separation, increasing key electrical performance parameters.
- Improved cable temperature rating (75°C Riser) for greater protection against increased operating temperatures.
- Footage marking from 1000' to 0'
- Verified by third-party for guaranteed 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)
- EC Verified (Certified by DELTA)
- REACH Compliant
- CPR Compliant (Fully Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG



Jacket

- Non-Plenum: Flame-Retardant PVC

Rip Cord

- Applied longitudinally under jacket

Separator/Spline

- Divider

Conductor

- 23 AWG solid bare copper

Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer/Dual-Layer Polyolefin

PHYSICAL PROPERTIES

Conductor	Material	Solid Bare Copper
	Conductor Diameter	0.53
Insulation	Material	HDPE
	Average Thickness	0.21
	Insulation Dia. (±0.05mm)	0.95
	Minimum point Thickness	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)	5.8
Rip Cord		Yes
Voltage Rating (Max)		DC 300V



ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz 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: 25 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%.

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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

Electrical performance with frequency over 250MHz is only for reference

AVAILABLE JACKET COLORS			
STANDARD	BLUE	WHITE	GRAY
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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