

# 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

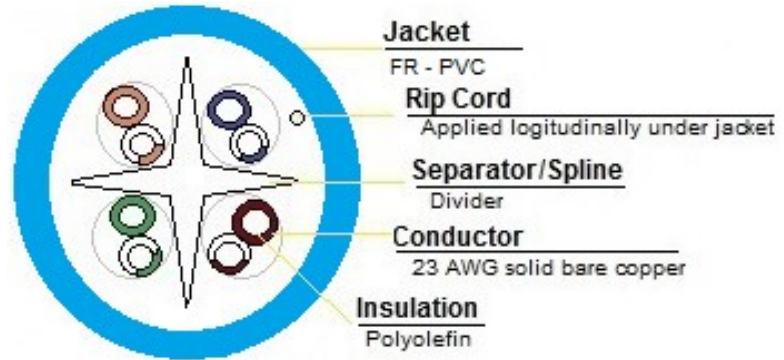
- Innovative cross-web design allowing for maximum pair separation, increasing key electrical performance parameters.
- Improved cable temperature rating (75°C Riser) for greater protection against increased operating temperatures.
- Sequential footage markings
- Verified by third-party for guaranteed 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
	Conductor Diameter (mm)	0.53
Insulation	Material	HDPE
	Average Thickness (mm)	0.21
	Insulation Dia. (±0.05mm)	0.95
	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)	5.8
Rip Cord		Yes
Put/UTPs	Length	1000ft ± 4ft
	Weight	25 lbs/Pull Box
Voltage Rating (Max)		DC 300V
Flame Test Method		CMR



## 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
<b>6CMR244Bx</b>	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\*

Toll Free: (866) 945-5051  
Local: (770) 945-5051  
Fax: (770) 945-9582  
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	YELLOW
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	

Toll Free: (866) 945-5051  
 Local: (770) 945-5051  
 Fax: (770) 945-9582  
[www.commoditycables.com](http://www.commoditycables.com)



\*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\*