

# CAT5E 24AWG/4PAIR CMR 350MHz U/UTP

**PART NO. 5ECMR244BX**



## DESCRIPTION

- 24 AWG 4Pair U/UTP Category 5E cable tested to 350 MHz. Available in Pull Box / Speed Bag

## FEATURES AND BENEFITS

- Structured Cabling for Ethernet Networks
- Unique pair twisting for balanced line signaling
- Performance guaranteed to 350 MHz
- Sequential footage markings
- Verified by third-party for guaranteed performance

## APPLICATIONS

- IEEE 802.3: 1000Base-T, 100 Base-TX, 10Base-T, PoE, PoE+
- 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 Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG

## PHYSICAL PROPERTIES

Conductor	Material	Copper
	Nominal Outside Diameter (mm)	0.46
Insulation	Material	HDPE
	Diameter (± 0.05mm)	0.86
Screen Material		None
Construction		CMR/Non-Plenum
Jacket	Material	FR-PVC
	Average Thickness (mm)	0.55
	Minimum Point Thickness (mm)	0.50
	Outside Diameter (±0.2mm)	5.0
Rip Cord:		250D Nylon
Drain Wire:		None
Packing	Length	1000ft
	Weight	18 lbs
Voltage Rating (Max)		300V
Flame Test Method		CMR



## ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz characteristic impedance (ohms)		100±15
250-650.0MHz Delay Skew (ns/100m)		45
Pair-to-Ground Capacitance Unbalance (Pf/100m)		53
Max. Conductor DC Resistance Unbalance (%)		115
Max. Resistance Unbalance (%)		3
Max Mutual Capacitance		330
Max DC Loop Resistance		25
Min DC Insulation Resistance		-
Max Propagation Delay Skew		45
Before Aging	Tensile Strength (Mpa)	≥13.8
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥85% of unaged
	Elongation (%)	≥50% of unaged
Aging Period (°C x hrs)		100x240
Cold Bend (No Visible Crack)		-40±2°C
Temperature Range		-20 ~ 75°C
Velocity of Propagation (%) NVP		68



1000' Pull Box  
Weight: 18 lbs.

## AVAILABLE CATEGORY 5E (PART NUMBERS)

PVC	Plenum	Shielded	Shielded Plenum	Direct Burial	Shielded Direct Burial
5ECMR150CO	5ECMP244Bx	5ESHDCMRBx	5ESHDCMPBx	5EOUT244RB	5EOUTGSHDRB
<b>5ECMR244Bx</b>	5ECMP150CO			5EOUTG244RB	5EOUTWSHDRB
5ECMR2425RG	5ECMP2425RO			5EOUTW244RB	5EOUTSHDDJRB
5ECMSTRxx				5EOUTA244RB	

\*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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## 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)
1	2.2	20.0	63.1	65.3	62.3	n/s	570.0	63.8	60.8
4	4.3	23.0	52.0	56.3	53.3	n/s	552.0	51.7	48.7
8	6.38	24.5	45.42	51.8	48.8	n/s	546.7	45.7	42.7
10	7.15	25.0	43.15	50.3	47.3	n/s	545.4	43.8	40.8
16	9.02	25.0	38.18	47.2	44.2	n/s	543.0	39.7	36.7
20	10.23	25.0	35.57	45.8	42.8	n/s	542.1	37.7	34.7
25	11.44	24.3	32.86	44.3	41.3	n/s	541.2	35.8	32.8
31.25	12.87	23.6	30.03	42.9	39.9	n/s	540.4	33.9	30.9
62.5	18.7	21.5	19.7	38.4	35.4	n/s	538.6	27.8	24.8
100	24.2	20.1	11.1	35.3	32.3	n/s	537.6	23.8	20.8
200	---	18.0	---	30.8	27.8	n/s	536.5	17.7	14.7
350	---	16.3	--	27.2	26.3	n/s	535	12.9	9.9

\*Electrical performance with frequency over 250MHz is only for reference\*

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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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