

# CAT5E 24AWG/25PAIR CMP 100MHz U/UTP

**PART NO. 5ECMP2425RX**

## DESCRIPTION

- 24 AWG 25Pair U/UTP Category 5E cable tested to 100 MHz. Available on Wood Reels.

## 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	Bare Copper
	Nominal Outside Diameter (mm)	25x2x0.50±0.05
Insulation	Material	FEP
	Diameter (± 0.03mm)	0.86
Filler		LSZH
Cunstruction		Unshielded/Plenum
Jacket	Material	Low Smoke FR-PVC
	Average Thickness (mm)	0.5
	Minimum Point Thickness (mm)	0.7
	Outside Diameter (±0.2mm)	11.6
Rip Cord:		Yes
Drain Wire:		None
Packing	Length	1000ft/Wood Reel
	Weight	92 lbs
Voltage Rating (Max)		300V
Flame Test Method		CMP

## ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz characteristic impedance (ohms)	100Ω±15	
250-650.0MHz Delay Skew (ns/100m)	≤45	
Pair-to-Ground Capacitance Unbalance (Pf/100m)	≤500	
Max. Conductor DC Resistance Unbalance (%)	5.0	
Max. Resistance Unbalance (%)	≤5	
Max Mutual Capacitance	5.6nF/100m	
Max DC Loop Resistance	25	
Min DC Insulation Resistance	5000MΩ/Km	
Max Propagation Delay Skew	45	
Before Aging	Tensile Strength (Mpa)	≥17.2
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥85% of unaged
	Elongation (%)	≥75
Aging Period (°C x hrs)	100x240	
Cold Bend (No Visible Crack)	-40±2°C	
Temperature Range	-20 ~ 75°C	
Velocity of Propagation (%) NVP	69	

1000' Wood Reel  
Weight: 92 lbs.

## AVAILABLE CATEGORY 5E (PART NUMBERS)

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

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

### 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	3.0	20.0	n/s	60.0	57.0	n/s	521	58.6	55.6
4	3.9	23.0	n/s	54.8	51.8	n/s	504	46.6	43.6
8	5.5	24.5	n/s	50.0	47.0	n/s	500	40.6	37.5
10	6.2	25.0	n/s	48.5	45.5	n/s	498	38.6	35.6
16	7.9	25.0	n/s	45.2	42.2	n/s	496	34.5	31.5
20	8.9	25.0	n/s	43.7	40.7	n/s	495	32.6	29.6
25	10.0	24.3	n/s	42.1	39.1	n/s	495	30.7	27.7
31.25	11.2	23.6	n/s	40.5	37.5	n/s	494	28.7	25.7
62.5	16.2	21.5	n/s	35.7	32.7	n/s	492	22.7	19.7
100	21.0	20.1	n/s	32.3	29.3	n/s	491	18.6	15.6

\*Electrical performance with frequency over 100MHz is only for reference\*

### 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	

AVAILABLE JACKET COLORS			
STANDARD	BLUE		
SPECIAL	Per Customer Request*		
INSULATION COLORS			
PAIR 1	BLUE	WHITE	BLUE
PAIR 2	GREEN	WHITE	GREEN
PAIR 3	GRAY	WHITE	GRAY
PAIR 4	ORANGE	RED	ORANGE
PAIR 5	BROWN	RED	BROWN
PAIR 6	BLUE	BLACK	BLUE
PAIR 7	GREEN	BLACK	GREEN
PAIR 8	GRAY	BLACK	GRAY
PAIR 9	ORANGE	YELLOW	ORANGE
PAIR 10	BROWN	YELLOW	BROWN
PAIR 11	BLUE	VIOLET	BLUE
PAIR 12	GREEN	VIOLET	GREEN
PAIR 13	GRAY	VIOLET	GRAY
PAIR 14	ORANGE	WHITE	ORANGE
PAIR 15	BROWN	WHITE	BROWN
PAIR 16	BLUE	RED	BLUE
PAIR 17	GREEN	RED	GREEN
PAIR 18	GRAY	RED	GRAY

PAIR 19	ORANGE	BLACK	ORANGE
PAIR 20	BROWN	BLACK	BROWN
PAIR 21	BLUE	YELLOW	BLUE
PAIR 22	GREEN	YELLOW	GREEN
PAIR 23	GRAY	YELLOW	GRAY
PAIR 24	ORANGE	VIOLET	ORANGE
PAIR 25	BROWN	VIOLET	BROWN

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