

CAT6 24 AWG/4PAIR CM 250MHz U/ UTP STRANDED PATCH CABLE

PART NO. 6CMSTRXX

DESCRIPTION

- 24 AWG 4Pair U/UTP Category 6 Stranded patch cable tested to 250 MHz. Available on Wood Reels & Pull Box.

FEATURES AND BENEFITS

- Structured Cabling for Ethernet Networks
- Unique pair twisting for balanced line signaling
- Performance guaranteed to 250 MHz
- 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 Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG

PHYSICAL PROPERTIES

Conductor	Material	Bare Copper
	Nominal Outside Diameter (mm)	0.500±0.05
Insulation	Material	HDPE
	Diameter (± 0.05mm)	1.05
Screen Material		None
Construction		CM/Non-Plenum
Jacket	Material	PVC
	Average Thickness (mm)	0.50
	Minimum Point Thickness (mm)	0.7
	Outside Diameter (±0.2mm)	5.8
Rip Cord:		Yes
Drain Wire:		None
Packing	Length	1000ft/Pull Box & Wood Reel
	Weight	24lbs Pull Box/28lbs Wood Reel
Voltage Rating (Max)		300V

ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz characteristic impedance (ohms)		100Ω±15
250MHz Delay Skew (ns/100m)		≤45
Pair-to-Ground Capacitance Unbalance (Pf/100m)		160Max
Max. Conductor DC Resistance Unbalance (%)		9.5Ω/100m
Max. Resistance Unbalance (%)		2
Max Mutual Capacitance		5600 pF/100m
Max DC Loop Resistance		25
Min DC Insulation Resistance		5000 MΩ-Km
Max Propagation Delay Skew		45
Before Aging	Tensile Strength (Mpa)	≥13.8
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥75% of unaged
	Elongation (%)	≥50% of unaged
Aging Period (°C x hrs)		100x168
Cold Bend (No Visible Crack)		-40±2°C
Temperature Range		-20 ~ 75°C
Velocity of Propagation (%) NVP		69

1000' Wood Reel
Weight: 28 lbs.
1000' Pull Box
Weight: 24 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
6CMSTRxx				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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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	2.0	n/s	n/s	74.3	72.3	n/s	n/s	n/s	n/s
4	3.8	n/s	n/s	65.3	63.3	n/s	n/s	n/s	n/s
10	6.0	n/s	n/s	59.3	57.3	n/s	n/s	n/s	n/s
16	7.6	n/s	n/s	56.2	54.2	n/s	n/s	n/s	n/s
20	8.5	n/s	n/s	54.8	52.8	n/s	n/s	n/s	n/s
31.25	10.7	n/s	n/s	51.9	49.9	n/s	n/s	n/s	n/s
62.5	15.4	n/s	n/s	47.4	45.4	n/s	n/s	n/s	n/s
100	19.8	n/s	n/s	44.3	42.3	n/s	n/s	n/s	n/s
150	24.9	n/s	n/s	41.4	39.4	n/s	n/s	n/s	n/s
200	29.0	n/s	n/s	39.8	37.8	n/s	n/s	n/s	n/s
250	32.8	n/s	n/s	38.3	36.3	n/s	n/s	n/s	n/s

Electrical performance with frequency over 250MHz is only for reference

JACKETS ABBREVIATION

AVAILABLE JACKET COLORS			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.)
STANDARD	BLUE	WHITE	White	W	
	BLACK	YELLOW	Gray	G	
SPECIAL	Per Customer Request*		Blue	O	
INSULATION COLORS			Yellow	Y	
PAIR 1	BLUE	WHITE	Green	V	
PAIR 2	ORANGE	WHITE	Orange	OR	
PAIR 3	GREEN	WHITE	Purple	P	
PAIR 4	BROWN	WHITE	Red	R	
			Pink	PI	

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