

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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