

# CAT6 23AWG/4PAIR CMP 600MHz SHIELDED PLENUM F/UTP

## PART NO. 6SHDCMPRX

### DESCRIPTION

- 23 AWG 4 Pair F/UTP Category 6 cable tested to 600Mhz premium grade, high performance for top level network cabling for maximum headroom and bandwidth. Available in wood reel for easier installation.

### FEATURES AND BENEFITS

- Cross web filler for enhanced performance
- Improved cable temperature rating (90°C Plenum) 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+
- 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

#### Drain Wire

Used to ease termination of the cable shield for crimping or soldering



### PHYSICAL PROPERTIES

Conductor	Material	Bare copper
	Nominal Outside Diameter (mm):	0.565
Insulation	Material	FEP
	Diameter (± 0.05mm)	1.09
Filler		Low Smoke
Construction		Shielded/Plenum
Jacket	Material	LS-FR PVC
	Average Thickness (mm)	0.5
	Minimum Point Thickness (mm)	0.43
	Outside Diameter (±0.5mm)	7.1
Rip Cord:		Yes
Drain Wire:		0.4TC
Put/UPs	Length	1000ft ± 4ft
	Weight	48 lbs/Reel
Voltage Rating (Max)		DC 300V
Flame Test Method		CMP



### ELECTRICAL CHARACTERISTICS

1.0 - 250.0MHz impedance (Ω)		100±15
1.0 - 100.0MHz Delay Skew (ns/100m)		≤45
Capacitance Unbalance (pF/100m)		≤330
Max. Conductor DC Resistance Unbalance (%)		5.0
Max. DC Resistance (Ω/100m)		9.38
Before Aging	Tensile Strength (Mpa)	≥13.8
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥85% of unaged
	Elongation (%)	≥75
Aging Period (°C x hrs)		100°C x 24h x 7d
Cold Bend (No Visible Crack)		-20±2°C
Temperature Range		-20°C ~ +75°C
NVP		69%



1000' Wood Reel  
Weight: 48 lbs.

### AVAILABLE CATEGORY 6 (PART NUMBERS)

PVC	Plenum	Shielded	Shielded Plenum	Direct Burial	Shielded Direct Burial
6CMR244Bx	6CMP234Bx	6SHDCMRRx	<b>6SHDCMPRX</b>	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\*

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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)
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
300	36.4	16.8	0.7	37.1	35.1	-	536.1	18.3	15.3
350	39.8	16.3	-	36.1	34.1	-	535.9	16.9	13.9
400	43.0	15.9	-	35.3	33.3	-	535.8	15.8	12.8
500	48.9	15.2	-	33.8	31.8	-	535.6	13.8	10.8
550	51.8	14.9	-	33.2	31.2	-	535.5	13.0	10.0
600	54.2	14.7	-	32.9	30.9	-	535.4	12.2	9.2

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

### 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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