

**PART NO. 6OUT234RX**
**DESCRIPTION**

- 23 AWG 4 Pair U/UTP Category 6 cable tested to 550Mhz premium grade, high performance for top level network cabling for maximum headroom and bandwidth. Available in wood reel for easier installation.

**FEATURES AND BENEFITS**

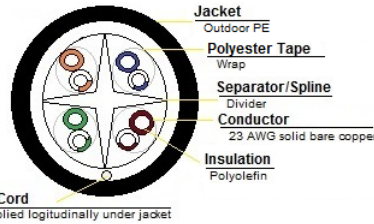
- Cross web filler for enhanced performance
- Rugged jacket for outside plant applications
- UV resistant polyethylene jacket
- Sequential footage markings
- Verified by third-party for guaranteed performance

**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 Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG


**PHYSICAL PROPERTIES**

Conductor	Material	Solid Bare Copper
	Conductor Diameter (mm)	0.55
Insulation	Material	PE
	Average Thickness (mm)	0.215
	Insulation Dia. ( $\pm 0.05\text{mm}$ )	0.98
	Minimum point Thickness (mm)	0.188
Construction		Direct Burial/UV Rated
Twisting Lay Length		30 Underneath
Cabling Lay Length ( $\pm 20\text{mm}$ )		90
Jacket	Material	LLDPE / UV Rated
	Average Thickness (mm)	0.55
	Minimum Point Thickness (mm)	0.45
	Outer Diameter ( $\pm 0.5\text{mm}$ )	6.5
Rip Cord		Per Request
Put/UPs	Length	1000ft $\pm$ 4ft
	Weight	27 lbs/Reel
Voltage Rating (Max)		DC 300V

**ELECTRICAL CHARACTERISTICS**

1.0 - 100.0MH impedance (ohms)		100 $\pm$ 15
1.0 - 350.0MH Delay Skew (ns/100m)		$\leq 45$
Pair - To - Ground Capacitance Unbalance (pF/100m)		$\leq 330$
Max. Conductor DC Resistance 20°C (ohms/100m)		9.38
Resistance Unbalance (%)		$\leq 5$
Before Aging	Tensile Strength (Mpa)	$\geq 10$
	Elongation (%)	$\geq 350$
After Aging	Tensile Strength (Mpa)	-
	Elongation (%)	$\geq 300$
Aging Condition ( $^{\circ}\text{C}$ x hrs)		100 x 168
Cold Bend (No Visible Crack)		$-40\pm 2^{\circ}\text{C}$
Temperature Range		$-40^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$

1000' Wood Reel  
Weight: 27 lbs.

**AVAILABLE CATEGORY 6 (PART NUMBERS)**

PVC	Plenum	Shielded	Shielded Plenum	Direct Burial	Shielded Direct Burial
6CMR244Bx	6CMP234Bx	6SHDCMRRx	6SHDCMPRx	<b>6OUT234RB</b>	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\*

Toll Free: (866) 945-5051  
Local: (770) 945-5051  
Fax: (770) 945-9582  
www.commoditycables.com



### 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

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

AVAILABLE JACKET COLORS		
STANDARD	BLACK	
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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