

PRODUCT SPECIFICATIONS
CAT6 U/UTP

COMPLIANCE

RoHS	YES
UL/cUL listed	YES

CERTIFICATIONS

EIA/TIA 568-C.2	ISO 11801
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PHYSICAL SPECIFICATIONS

Conductor Material	Solid Bare Copper	
Conductor Size	23 AWG x 4P	
Conductor Diameter	Ø 0.56±/-0.008 mm	
Insulating Material Type	HDPE	
Insulation Diameter	Ø 1.0±/-0.05 mm	
Insulation Avg.Thickness	0.22±/-0.05 mm	
Number of Insulations	4 Pair	
PAIR COLORS	P1	White-Blue/Blue
	P2	White-Orange/Orange
	P3	White-Green/Green
	P4	White-Brown/Brown
Jacket Material	PVC	
Jacket Diameter	Ø 6.5±/-0.2 mm	
Jacket Avg. Thickness	0.6±/-0.1 mm	
Jacket Flame Rate	CM/CMR	
Rip Cord	Nylon	

MECHANICAL CHARACTERISTICS

Cable under the minimum tension	≥ 400N
Conductor Elongation	≥ 15%

JACKET

Unaged	Tensile Strength	≥ 13.5 Mpa
	Elongation	≥ 150%
Aged	Tensile Strength	≥ 12.5 Mpa
	Elongation	≥ 125%

ELECTRICAL CHARACTERISTICS

Impedance	1-550 MHz 100±15 (Ohms)
Cold Bend Test	-20 °C 4 hours No Cracking
Overall Temp. Rating	75° C
DC Resistance Unbalance	Max. 2.5%
DC Resistance 20 °C	87 (Ohms/Km)
Pair-to-Ground Capacitance Unbalance	330 (pF/100M)
Insulation Resistance	>5000MΩ*Km
Dielectric Strength	DC 2500V 2s

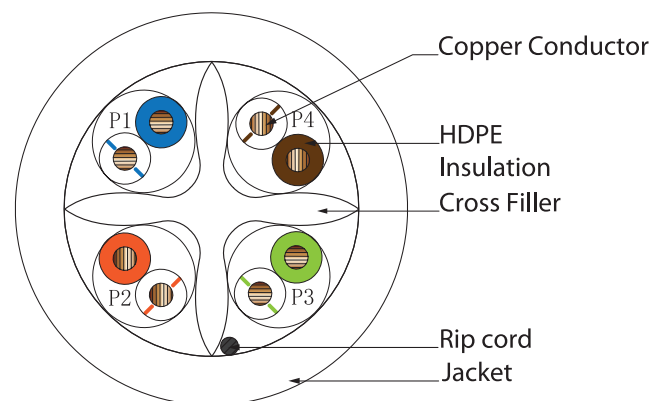
NOMINAL TRANSMISSION CHARACTERISTICS

FREQUENCY (MHz)	RETURN LOSS (dB)	ATTENUATION (dB/100M)	NEXT (dB)	PSNEXT (dB)
1	20.0	2.0	74	72
4	23.0	3.8	65	63
10	25.0	6.0	59	57
16	25.0	7.6	56	54
20	25.0	8.5	55	53
31.25	23.6	10.7	52	50
62.5	21.5	15.4	47	45
100	20.1	19.8	44.3	42.3
200	18.0	29.0	39.7	37.7
250	17.3	32.8	38	36
300	17.3	36.61	38.14	35.14
350	17.3	39.98	37.14	34.14
400	17.3	43.17	35.3	33.3
450	17.3	46.22	35.14	32.65
500	17.3	49.16	34.82	31.82
550	17.3	51.40	33.97	31.07

NOTE: The above transmission performance for the 100M, 20±2 °C under the conditions tested

PART NUMBER CABLE TYPE COLOR LENGTH

MBW6U-00934	CMR	Blue	1000 ft. pullbox
MBW6U-01623	CMR	Gray	1000 ft. pullbox
MBW6U-01444	CMR	White	1000 ft. pullbox
MBW6U-00935	CMR	Yellow	1000 ft. pullbox



NOTE: TECHNICAL SHEETS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

