

DATA SHEET COPPER CABLE

F/UTP CAT 6 EC VERIFIED – SOLID CONDUCTOR

This cable is compliant to ANSI/TIA-568-C.2, ISO/IEC 11801 and EN 50173

CONSTRUCTION

Conductor	23 AWG solid bare copper
Insulation	Polyolefin
Pairs	4 Twisted pairs
Pair Colour Code	Blue/White-Blue, Orange/White-Orange, Green/White-Green, Brown/White-Brown
Screen	Aluminium laminate screen
Sheath	PVC



ELECTRICAL CHARACTERISTICS STANDARD FOR CATEGORY 6

Frequency MHz	Attenuation dB/100 m	NEXT dB	PSNEXT dB	ACR	PSACR	ELFEXT dB	PSELFEXT dB	Return Loss
1	2.0	74.3	72.3	72.3	70.3	67.8	64.8	20.0
4	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0
8	5.3	60.8	58.8	55.4	53.4	49.7	46.7	24.5
10	6.0	59.3	57.3	53.3	51.3	47.8	44.8	25.0
16	7.6	56.2	54.2	48.6	46.7	43.7	40.7	25.0
20	8.5	54.8	52.8	46.3	44.3	41.8	38.8	25.0
25	9.5	53.3	51.3	43.8	41.8	39.8	36.8	24.3
31.25	10.7	51.9	49.9	41.1	39.2	37.9	34.9	23.6
62.5	15.4	47.4	45.4	32	30	31.9	28.9	21.5
100	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.1
200	29.0	39.8	37.8	10.8	8.8	21.8	18.8	18.0
250	32.8	38.3	36.3	5.5	3.5	19.8	16.8	17.3

ELECTRICAL CHARACTERISTICS @ 20°C

DC Resistance:	80 Ohms/km (Max)
Resistance Unbalance:	2% (Max)
Mutual capacitance @ 1 kHz:	56 nF/km (Max)
Capacitance Unbalance:	1000 pF/km (Max)
Delay Skew:	450 nsec/km (Max)
Velocity of Propagation:	0.68 c
Characteristic Impedance:	100 Ohms ± 15% @ 1.0 Mhz – 100 Mhz
Characteristic Impedance:	100 Ohms ± (15 + 0.05(f-100)) @ 100 Mhz – 250 Mhz

PHYSICAL PROPERTIES & PACKING

Fire safety Rating:	IEC 60332 Part 1
Outside Diameter (Nom):	7.9 mm
Weight (kg/km):	58
Temperature Range:	0° C to +50°C (Installation) -20°C to +70°C (Operational)
Standard Packaging:	305 m Plastic Reel