

Category 6A Data Cables – Enhanced 650MHz

23AWG, UTP with PVC or HFFR Sheath

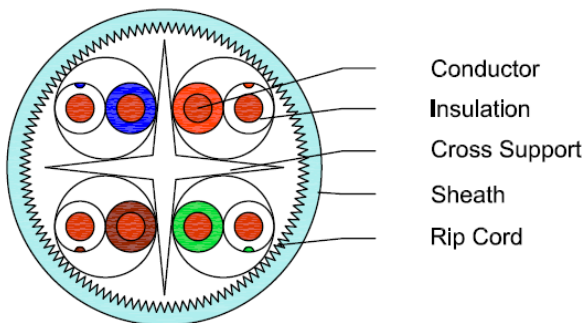


C1553, C1554

Application

Twisted pair cable suitable for High Speed Local Area Networks and Analogue & Digital video applications

Cross Section Drawing



Design

Unit	Properties
Conductor	Solid Plain Copper Wire
Insulation	Polyethylene Pair 1: WHITE-Blue/Blue Pair 2: WHITE-Orange/Orange Pair 3: WHITE-Green/Green Pair 4: WHITE-Brown/Brown
Pair	Two wires twisted together
Rip Cord	Nylon Yarn
Sheath Material	Polyvinyl Chloride (PVC) or Halogen Free, Flame Retardant (HFFR) Standard Color: Turquoise
Standard Put Up Length	305 Metres

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

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Physical Characteristics

Part Number	C1553	C1554
Sheath Material	PVC	HFFR
Screen type	UTP	
No. of Pairs	4	
Conductor Size (AWG)	23	
Nom. Radial Thickness Sheath (mm)	0.5	
Nom. Overall Diameter (mm)	7.0	
Operating Temperature (°C)	-20°C to +60°C	
Min. Bend Radius (install) (mm)	70	
Maximum Pulling Tension (Newton)	160	

Electrical Characteristics at 20°C

Max. DC resistance conductor ($\Omega/100m$)	Input Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
93.8	100	65	45	300

Freq. (MHz)	Min. Return Loss (dB)	Max. Attenuation (dB)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACRF (dB)	Min. PSACRF (dB)	Max. DELAY (ns)
1	20.0	2.1	74.3	72.3	67.8	64.8	570
4.0	23.0	3.8	65.3	63.3	55.8	52.8	552
8.0	24.5	5.3	60.8	58.8	49.7	46.7	547
10.0	25.0	5.9	59.3	57.3	47.8	44.8	545
16.0	25.0	7.5	56.2	54.2	43.7	40.7	543
20.0	25.0	8.4	54.8	52.8	41.8	38.8	542
25.0	24.3	9.4	53.3	51.3	39.8	36.8	541
31.25	23.6	10.5	51.9	49.9	37.9	34.9	540
62.5	21.5	15.0	47.4	45.4	31.9	28.9	539
100	20.1	19.1	44.3	42.3	27.8	24.8	538
200	18.0	27.6	39.8	37.8	21.8	18.8	537
250	17.3	31.1	38.3	36.3	19.8	16.8	536
300	16.8	34.3	37.1	35.1	18.3	15.3	536
400	15.9	40.1	35.3	33.3	15.8	12.8	536
500	15.2	45.3	33.8	31.8	13.8	10.8	536
550	14.9	47.7	33.2	31.2	13.0	10.0	536
600	14.7	50.1	32.6	30.6	12.2	9.2	536
650	14.4	52.3	32.1	30.1	11.5	8.5	536

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Reference Standards

ANSI/TIA-568-C2	IEC 61034 (HFFR only)
ISO/IEC 11801	IEC 60754-1 & 2 (HFFR only)
EN 50290-2	RoHS directives
IEC 60332-1	