Detailed Specifications & Technical Data



CI6522

Paired - Category 6 Unbonded - SF/UTP Cable



Description:

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, overall cabling tape, foil shield plus solid drain wire, tinned copper braid, PVC jacket.

SUITABLE APPLICATIONS:

Suitable Applications	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG
	ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6

PHYSICAL CHARACTERISTICS:

CONDUCTOR:						
Number of Pairs	4	4				
Total Number of Conductors	8	8				
AWG	24	24				
Stranding	Solid	Solid				
Conductor Material	BC - Bare Copper	BC - Bare Copper				
INSULATION:						
Insulation Material	PO - Polyolefin	PO - Polyolefin				
Insulation Nominal Diameter	1.10 mm For Blue & Green	1.10 mm For Blue & Green				
	1.02 mm For Orange & Brown	1.02 mm For Orange & Brown				
Pair Color Code Chart:						
Pair Number	Insu	lation Color				
	Wire 1	Wire 2				
1	Blue	White				
2	Orange	White with Orange Stripe				
3	Green	White with Green Stripe				
4	Brown	Brown White with Brown Stripe				

Overall Cabling Fillers	Central Spline
Overall Cabling With Separation Tape	Yes

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OUTER SHIELD:					
Outer Shield Material	Aluminum Foil – Polyester Tape				
Outer Shield Drain Wire Material	TC – Tinned Copper				
Outer Shield Braid Layer Material	TC – Tinned Copper				
Outer Shield Braid Coverage	\geq 40 %				
OUTER JACKET:					
Outer Jacket Material	PVC - Polyvinyl Chloride				
OVERALL NOMINAL DIAMETER:					
Nom. Overall Diameter	7.6 mm				
MECHNICAL CHARACTERISTICS:					
Operating Temperature Range	-20° C To $+75^{\circ}$ C				
Bulk Cable Weight	55.4 kg/km				
Max. Recommended Pulling Tension	110 N				
Min. Bend Radius (Install)	61 mm				
APPLICABLE SPECIFICATION AGENCY CO	MPLIANCE:				
APPLICABLE STANDARDS:					
NEC/(UL) Specification	СМ				
CEC/C(UL) Specification	СМ				
IEC Specification	11801 Class E				
EU RoHS Specification	2015/863/EU				
TIA Specification	568.2-D Category 6				
FLAME TEST:					
UL Flame Test	UL 1685 Loading				
SUITABILITY:					
Suitability – Indoor (Y/N)	Y				
Non-halogenated	Ν				
PLENUM/NON-PLENUM:					
Plenum (Y/N)	Ν				
ELECTRICAL CHARACTERISTICS:					
Nom. Mutual Capacitance @ 1 KHz	5.6 nF/100m				
Max. Capacitance Unbalance	160 pF/100m				
Nom. Velocity of Propagation	65 %				
Max. Delay @ 100 MHz	538 ns/100m				
Max. Delay Skew	45 ns/100m				
Max. Conductor DC Resistance @ 20 Deg.C	93.8 Ohms/km				



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Max. DCR Unbalance	@ 20 Deg.C
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$100 \pm$	15	Ohms

2 %

Characteristic Impedance Max. Operating Voltage

72 V DC

ELECTRICAL CHARACTERISTICS - PREMISES:

Premise Cable Electricals Table 1:

Frequency (MHz)	Max. Attenuation (dB/100m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. Return Loss (dB)	TCL	ELTCTL	Min. ACRF (dB)	Min. PSACRF (dB)
4	3.8	66.3	63.3	23.0	40	23	56.0	53.0
10	6.0	60.3	57.3	25.0	40	15	48.0	45.0
16	7.6	57.2	54.2	25.0	38	10.9	43.9	40.9
20	8.5	55.8	52.8	25.0	37	9	42.0	39.0
31.25	10.7	52.9	49.9	23.6	35.1	5.1	38.1	35.1
62.5	15.5	48.4	45.4	21.5	32	/	32.1	29.1
100	19.9	45.3	42.3	20.1	30	/	28.0	25.0
150	24.8	42.7	39.7	18.9	/	/	24.5	21.5
200	29.1	40.8	37.8	18.0	27	/	22.0	19.0
250	33	39.3	36.3	17.3	26	/	20.0	17.0

NOTES:

Notes

Jacket sequentially marked.

PUT-UPS AND COLORS:

Item	Description	Put-Up (meters.)	Ship Weight (kg)	Jacket Color
CI6522 006305M	4PR 24 AWG CAT 6 SF/UTP	305	17.1	BLU
CI6522 008305M	4PR 24 AWG CAT 6 SF/UTP	305	17.1	GRY
CI6522 010305M	4PR 24 AWG CAT 6 SF/UTP	305	17.1	BLK

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