874048514/10 | CS24P BLK C5E 4/24 U/UTP CPK 1KFT

ETL Verified Category 5e U/UTP Cable, plenum, black jacket, 4 pair count, 1000 (305 m) ft length, CommPak

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Twisted pair cable

General Specifications

Product Number	CS24P
ANSI/TIA Category	5e
Cable Component Type	Horizontal
Cable Type	U/UTP (unshielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	Black
Note	All electrical transmission tests include swept frequency measurements
Pairs, quantity	4
Transmission Standards	ANSI/TIA-568.2-D | CENELEC EN 50288-3-1 | ISO/IEC 11801 Class D

Dimensions

Cable Length	1000 ft | 304.8 m
Diameter Over Jacket, nominal	0.192 in | 4.877 mm
Jacket Thickness	0.02 in | 0.508 mm
Conductor Gauge, singles	24 AWG

Cross Section Drawing

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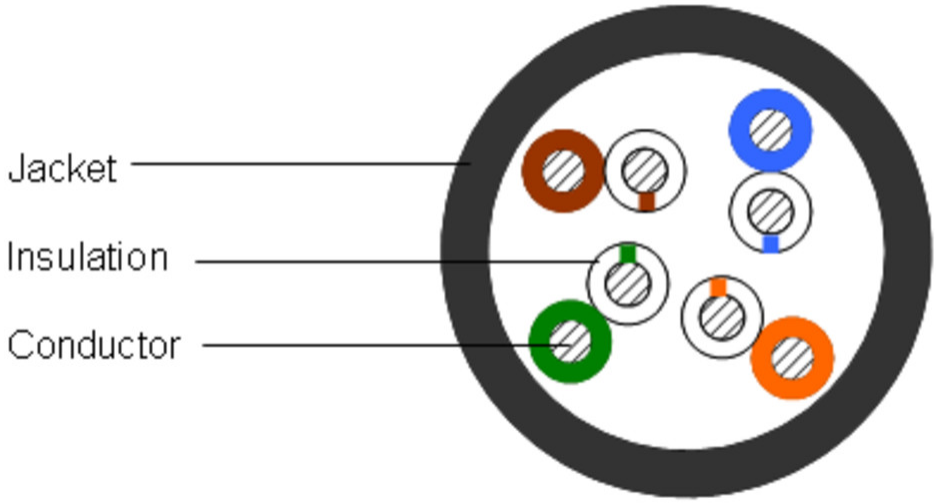

Electrical Specifications

Characteristic Impedance	100 ohm
dc Resistance Unbalance, maximum	5 %
dc Resistance, maximum	9.38 ohms/100 m | 2.859 ohms/100 ft
Delay Skew, maximum	15 ns
Dielectric Strength, minimum	1500 Vac | 2500 Vdc
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	76 %
Operating Frequency, maximum	200 MHz
Operating Voltage, maximum	80 V
Remote Powering	Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A
Safety Voltage Rating	300 V

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Electrical Cable Performance

CS	CommScope
STD	Refers to the standard value listed under Transmission Standards in the Electrical Specifications above
TYP	Typical Electrical Performance
IL	Insertion Loss (dB/100m)
ACR	Attenuation to Crosstalk Ratio (dB/100m)
PSACR	Power Sum Attenuation to Crosstalk Ratio (dB/100m)
PSACRF	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)
TCL	Transverse Conversion Loss (dB/100m)
NEXT	Near End Crosstalk (dB/100m)
PSNEXT	Power Sum Near End Crosstalk (db/100m)
ACRF	Attenuation to Crosstalk Ratio - Far End (dB/100m)
RL	Return Loss (dB)
ELTCTL	Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL	NEXT	ACR	PSNEXT	PSACR	ACRF	PSACRF	RL
	TYP	TYP	TYP	TYP	TYP	TYP	TYP	TYP
1	2.1	81.5	79.4	79.2	77.1	76.4	74.7	33.5
4	3.9	72.9	69	70.5	66.6	64.8	63.1	33.5
8	5.5	68.3	62.7	65.9	60.4	58.9	57.2	36.6
10	6.2	66.7	60.6	64.2	58.1	57	55.3	36.7
16	7.8	63.6	55.8	61.2	53.4	52.9	51.1	38.5
20	8.7	62	53.2	59.5	50.8	51	49.2	38.8
25	9.8	60.3	50.5	57.9	48.2	48.9	47.2	39.4
31.25	11	58.9	47.9	56.6	45.7	47	45.2	39.8
62.5	15.6	54.2	38.6	51.9	36.2	40.8	39	34.7
100	20	50.9	30.9	48.6	28.6	36.9	35.1	30.9
155	25.1	47.8	22.7	45.3	20.2	33.1	31.3	28.3
200	28.8	45.6	16.8	43.3	14.5	30.7	28.8	27.6
250	32.4	43.7	11.3	41.4	9.1	28.7	26.8	26.9
300	35.7	42	6.3	39.7	4	27	25.1	26.5
350	38.9	40.5	1.6	38.3	-0.6	25.2	23.3	25.6

Electrical Performance

Freq (MHz)	IL (dB/100m)			NEXT (dB/100m)			ACR (dB/100m)			PSNEXT (dB/100m)			PSACR (dB/100m)			ACRF (dB/100m)			PSACRF (dB/100m)			RL (dB)		
	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ	CS	Std	Typ
1	2.0	2.0	2.1	65.3	65.3	81.5	63.3	63.3	79.4	62.3	62.3	79.2	60.3	60.3	77.1	63.8	63.8	76.4	60.8	60.8	74.7	20.0	20.0	33.5
4	4.1	4.1	3.9	56.3	56.3	72.9	52.2	52.2	69.0	53.3	53.3	70.5	49.2	49.2	66.6	51.8	51.8	64.8	48.8	48.8	63.1	23.0	23.0	33.5
8	5.8	5.8	5.5	51.8	51.8	68.3	46.0	46.0	62.7	48.8	48.8	65.9	43.0	43.0	60.4	45.7	45.7	58.9	42.7	42.7	57.2	24.5	24.5	36.6
10	6.5	6.5	6.2	50.3	50.3	66.7	43.8	43.8	60.6	47.3	47.3	64.2	40.8	40.8	58.1	43.8	43.8	57.0	40.8	40.8	55.3	25.0	25.0	36.7
16	8.2	8.2	7.8	47.2	47.2	63.6	39.0	39.0	55.8	44.2	44.2	61.2	36.0	36.0	53.4	39.7	39.7	52.9	36.7	36.7	51.1	25.0	25.0	38.5
20	9.3	9.3	8.7	45.8	45.8	62.0	36.5	36.5	53.2	42.8	42.8	59.5	33.5	33.5	50.8	37.8	37.8	51.0	34.8	34.8	49.2	25.0	25.0	38.8
25	10.4	10.4	9.8	44.3	44.3	60.3	33.9	33.9	50.5	41.3	41.3	57.9	30.9	30.9	48.2	35.8	35.8	48.9	32.8	32.8	47.2	24.3	24.3	39.4
31.25	11.7	11.7	11.0	42.9	42.9	58.9	31.2	31.2	47.9	39.9	39.9	56.6	28.2	28.2	45.7	33.9	33.9	47.0	30.9	30.9	45.2	23.6	23.6	39.8
62.5	17.0	17.0	15.6	38.4	38.4	54.2	21.4	21.4	38.6	35.4	35.4	51.9	18.4	18.4	36.2	27.9	27.9	40.8	24.9	24.9	39.0	21.5	21.5	34.7
100	22.0	22.0	20.0	35.3	35.3	50.9	13.3	13.3	30.9	32.3	32.3	48.6	10.3	10.3	28.6	23.8	23.8	36.9	20.8	20.8	35.1	20.1	20.1	30.9
155	28.1		25.1	32.4		47.8	4.4		22.7	29.4		45.3	1.4		20.2	20.0		33.1	17.0		31.3	18.8		28.3
200	32.4		28.8	30.8		45.6	-1.6		16.8	27.8		43.3	-4.6		14.5	17.8		30.7	14.8		28.8	18.0		27.6
250			32.4			43.7			11.3			41.4			9.1			28.7			26.8			26.9
300			35.7			42.0			6.3			39.7			4.0			27.0			25.1			26.5
350			38.9			40.5			1.6			38.3			-0.6			25.2			23.3			25.6

CS = CommScope | Std = Standard value listed under Transmission Standards in the Electrical Specifications | Typ = Typical

Material Specifications

Conductor Material	Bare copper

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Insulation Material	FEP | Polyolefin
Jacket Material	PVC

Mechanical Specifications

Pulling Tension, maximum	25 lb | 11.34 kg

Environmental Specifications

Installation temperature	0 °C to +60 °C (+32 °F to +140 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Environmental Space	Plenum
Flame Test Method	CMP/FT6 | NEC Article 800 | NFPA 262 | UL 444 | UL 910
Smoke Test Method	CMP/FT6

Packaging and Weights

Cable weight	20.41 lb/kft | 30.373 kg/km
Packaging Type	CommPak® box

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system