

CS41Z1, ETL Verified Category 6A U/UTP Cable, low smoke zero halogen, gray jacket, 4 pair count, 1000 ft (305 m) length reel

Product Classification

Regional Availability	Asia Australia/New Zealand
Portfolio	NETCONNECT®
Product Type	Twisted pair cable

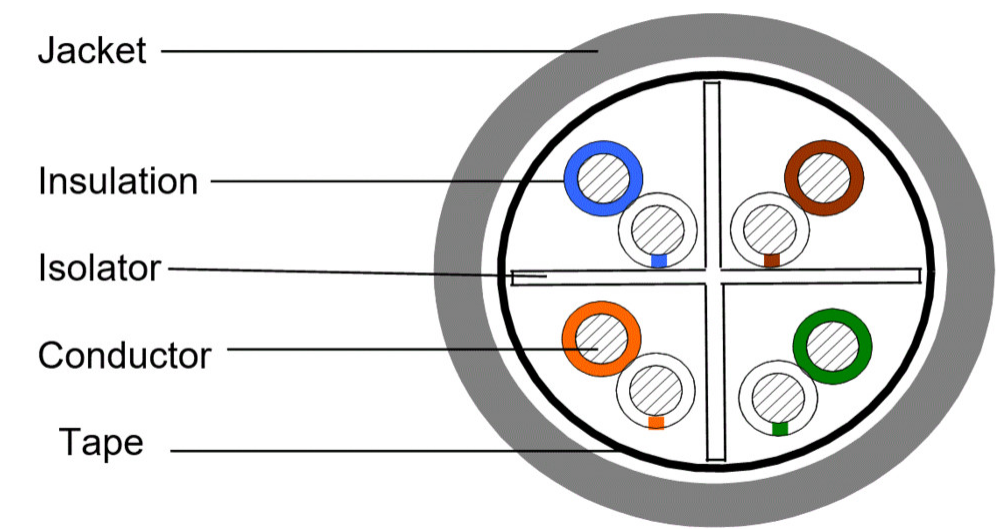
General Specifications

Product Number	CS41Z1
ANSI/TIA Category	6A
Cable Component Type	Horizontal
Cable Type	U/UTP (unshielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	Gray
Pairs, quantity	4
Separator Type	Isolator
Transmission Standards	ANSI/TIA-568.2-D IEC 61156-5

Dimensions

Cable Length	304.8 m 1000 ft
Diameter Over Insulated Conductor	1.08 mm 0.043 in
Diameter Over Jacket, nominal	6.985 mm 0.275 in
Jacket Thickness	0.508 mm 0.02 in
Conductor Gauge, singles	24 AWG

Cross Section Drawing



Electrical Specifications

dc Resistance Unbalance, maximum	4 %
dc Resistance, maximum	8 ohms/100 m 2.438 ohms/100 ft
Delay Skew, maximum	45 ns
Dielectric Strength, minimum	1500 Vac 2500 Vdc
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	67 %
Operating Frequency, maximum	500 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
Segregation Class	b

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)	NEXT	Near End Crosstalk (dB/100m)
ACR	Attenuation to Crosstalk Ratio (dB/100m)	PSNEXT	Power Sum Near End Crosstalk (db/100m)
PSACR	Power Sum Attenuation to Crosstalk Ratio (dB/100m)	ACRF	Attenuation to Crosstalk Ratio - Far End (dB/100m)
PSACRF	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)	RL	Return Loss (dB)
TCL	Transverse Conversion Loss (dB/100m)	ELTCTL	Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL	NEXT	ACR	PSNEXT	PSACR	ACRF	PSACRF	RL
	STD	STD	STD	STD	STD	STD	STD	STD
1	2.1	75.3	73.2	72.3	70.2	68	65	20
4	3.8	66.3	62.5	63.3	59.5	55.9	53	23
8	5.3	61.7	56.4	58.7	53.4	49.9	46.9	24.5
10	5.9	60.3	54.4	57.3	51.4	48	45	25
16	7.5	57.2	49.7	54.2	46.7	43.9	40.9	25
20	8.4	55.8	47.4	52.8	44.4	42	39	25
25	9.4	54.3	44.9	51.3	41.9	40	37	24.3
31.25	10.5	52.9	42.4	49.9	39.4	38.1	35.1	23.6
62.5	15	48.4	33.4	45.4	30.4	32.1	29.1	21.5
100	19.1	45.3	26.2	42.3	23.2	28	25	20.1
155	24.1	42.4	18.3	39.4	15.3	24.2	21.2	18.8
200	27.6	40.8	13.2	37.8	10.2	22	19	18
250	31.1	39.3	8.3	36.3	5.3	20	17	17.3
300	34.3	38.1	3.9	35.1	0.9	18.4	15.5	16.8
350	37.2	37.1	-0.1	34.1	-3.1	17.1	14.1	16.3
400	40.1	36.3	-3.8	33.3	-6.8	15.9	13	15.9
500	45.3	34.8	-10.5	31.8	-13.5	14	11	15.2

Material Specifications

Conductor Material	Bare copper
Insulation Material	Polyolefin
Jacket Material	Low Smoke Zero Halogen (LSZH)
Separator Material	Polyolefin
Tape Material	Poly/Aluminum/Poly

Mechanical Specifications

Pulling Tension, maximum	11.34 kg 25 lb
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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	Low Smoke Zero Halogen (LSZH)
Flame Test Method	IEC 60332-1

Packaging and Weights

Cable weight	44.451 kg/km 29.87 lb/kft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

