

CS41Z1, ETL Verified Category 6A U/UTP Cable, low smoke zero halogen, white 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

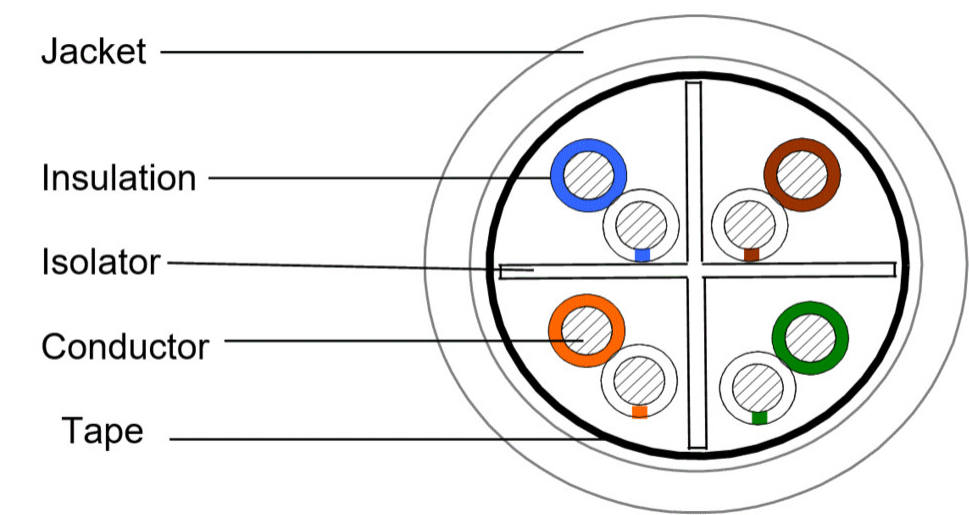
General Specifications

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	White
Pairs, quantity	4
Separator Type	Isolator
Transmission Standards	ANSI/TIA-568.2-D IEC 61156-5 ISO/IEC 11801 Class EA

Dimensions

Cable Length	304.8 m 1000 ft
Diameter Over Insulated Conductor	1.113 mm 0.044 in
Diameter Over Jacket, nominal	7.087 mm 0.279 in
Jacket Thickness	0.508 mm 0.02 in
Conductor Gauge, singles	23 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 Performance

CS CommScope value	IL Insertion Loss (dB/100m)	ACR Attenuation to Crosstalk Ratio (dB/100m)
Std Sandard value	RL Return Loss (dB)	ACRF Attenuation to Crosstalk Ratio - Far End (dB/100m)
(listed under the Transmission Standards in the Electrical Specifications above)	NEXT Near End Crosstalk (dB/100m)	PSACR Power Sum Attenuation to Crosstalk Ratio (dB/100m)
Typ Typical value	PSNEXT Power Sum Near End Crosstalk (dB/100m)	PSACRF Insertion Loss (dB/100m)

FREQUENCY	IL TYP	IL CS	IL STD	NEXT TYP	NEXT CS	NEXT STD	ACR TYP	ACR CS	ACR STD	PSNEXT TYP	PSNEXT CS	PSNEXT STD	PSACR TYP	PSACR CS	PSACR STD	ACRF TYP	ACRF CS	ACRF STD	PSACRF TYP	PSACRF CS	PSACRF STD	RL TYP	RL CS	RL STD
1.00 MHz			2.1			75.3			73.2			72.3			70.2			68			65			20
4.00 MHz			3.8			66.3			62.5			63.3			59.5			55.9			53			23
8.00 MHz			5.3			60.8			55.4			56.8			53.4			49.7			46.7			24.5
10.00 MHz			5.9			60.3			54.4			57.3			51.4			48			45			25
16.00 MHz			7.5			57.2			49.7			54.2			46.7			43.9			40.9			25
20.00 MHz			8.4			55.8			47.4			52.8			44.4			42			39			25
25.00 MHz			9.4			54.3			44.9			51.3			41.9			40			37			24.3
31.25 MHz			10.5			52.9			42.4			49.9			39.4			38.1			35.1			23.6
62.50 MHz			15			48.4			33.4			45.4			30.4			32.1			29.1			21.5
100.00 MHz			19.1			45.3			26.2			42.3			23.2			28			25			20.1
155.00 MHz			24.1			42.4			18.3			39.4			15.3			24.2			21.2			18.8
200.00 MHz			27.6			40.8			13.2			37.8			10.2			22			19			18
250.00 MHz			31.1			39.3			8.3			36.3			5.3			20			17			17.3
300.00 MHz			34.3			38.1			3.9			35.1			0.9			18.4			15.5			16.8
350.00 MHz			37.2			37.1			-0.1			34.1			-3.1			17.1			14.1			16.3
400.00 MHz			40.1			36.3			-3.8			33.3			-6.8			15.9			13			15.9
500.00 MHz			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	46.475 kg/km 31.23 lb/kft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

