884039854/16 | CS44Z3 ORG C6A 4/23 F/UTP RL 500M

CS44Z3 ETL Verified Category 6A F/UTP Cable, low smoke zero halogen, orange jacket, 4 pair count, 1640 ft (500 m) length, reel

Product Classification

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

General Specifications

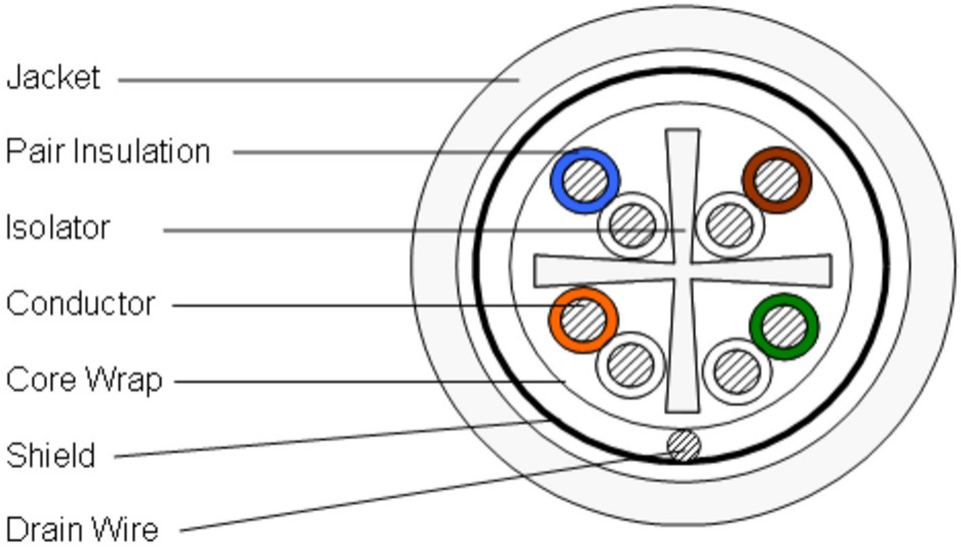
Product Number	CS44Z3
ANSI/TIA Category	6A
Cable Component Type	Horizontal
Cable Type	F/UTP (shielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Drain Wire Type	Solid
Jacket Color	Orange
Pairs, quantity	4
Separator Type	Isolator
Transmission Standards	ANSI/TIA-568.2-D

Dimensions

Cable Length	500 m | 1,640.42 ft
Diameter Over Jacket, nominal	7.518 mm | 0.296 in
Jacket Thickness	0.508 mm | 0.02 in
Conductor Gauge, singles	23 AWG
Drain Wire Gauge	26 AWG

Cross Section Drawing

884039854/16 | CS44Z3 ORG C6A 4/23 F/UTP RL 500M



Electrical Specifications

dc Resistance Unbalance, maximum	4 %
dc Resistance, maximum	8 ohms/100 m | 2.438 ohms/100 ft
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	68 %
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
Segregation Class	c

884039854/16 | CS44Z3 ORG C6A 4/23 F/UTP RL 500M

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	1.7	90.8	89.1	89.1	87.4	91.1	89.1	33.8
4	3.3	81.1	77.8	79.3	76	79.7	77.8	34.6
8	4.6	76.1	71.5	74.3	69.7	73.9	71.9	36.6
10	5.2	75	69.8	73	67.9	71.9	70	37.2
16	6.6	71	64.5	69.1	62.5	67.7	65.7	37.3
20	7.4	69.6	62.3	67.8	60.4	65.9	63.8	36
25	8.2	68.1	59.8	66.2	57.9	63.8	61.8	35
31.25	9.2	65.8	56.6	64.1	54.9	61.9	59.7	34
62.5	13	60.9	47.9	59.2	46.2	55.1	53	30.4
100	16.5	58.3	41.8	56.5	40	51.8	49.9	27.8
155	20.7	55.7	35	53.7	33.1	48.3	46.1	24.2
200	23.6	53.3	29.7	51.5	27.9	45.6	43.6	22.7
250	26.4	52	25.6	50	23.6	44.7	42.6	21.2
300	29.1	50	21	48	18.9	42.2	40.2	20
350	31.5	48.3	16.8	46.5	15	39.8	37.8	19.1
400	33.9	47.3	13.4	45.5	11.6	39.5	37.2	18
500	38.1	45.9	7.8	44	5.9	36.5	34.2	16.6

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)	
	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ
1	2.1	1.8	74.3	90.6	72.2	88.8	72.3	88.3	70.2	86.5	67.8	82.1	64.8	80.3	20.0	32.2
4	3.8	3.6	65.3	82.4	61.5	78.8	63.3	80.2	59.5	76.6	55.8	70.1	52.8	68.4	23.0	33.9
8	5.3	5.1	60.8	77.6	55.4	72.5	58.8	75.8	53.4	70.7	49.7	64.1	46.7	62.3	24.5	36.7
10	5.9	5.7	59.3	76.4	53.4	70.7	57.3	74.4	51.4	68.7	47.8	62.2	44.8	60.4	25.0	37.7
16	7.5	7.3	56.2	73.1	48.8	65.9	54.2	71.3	46.8	64.0	43.7	58.2	40.7	56.4	25.0	38.7
20	8.4	8.1	54.8	71.5	46.4	63.4	52.8	69.7	44.4	61.6	41.8	56.4	38.8	54.5	25.0	38.7
25	9.4	9.1	53.3	70.2	44.0	61.1	51.3	68.3	42.0	59.2	39.8	54.5	36.8	52.6	24.3	35.5
31.25	10.5	10.2	51.9	68.6	41.4	58.4	49.9	66.7	39.4	56.5	37.9	52.7	34.9	50.7	23.6	37.2
62.5	15.0	14.6	47.4	64.2	32.4	49.6	45.4	62.3	30.4	47.7	31.9	46.6	28.9	44.7	21.5	34.6
100	19.1	18.6	44.3	60.8	25.2	42.1	42.3	59.0	23.2	40.3	27.8	42.5	24.8	40.5	20.1	30.3
155	24.1	23.4	41.4	58.4	17.4	35.0	39.4	56.4	15.4	33.0	24.0	38.9	21.0	37.0	18.8	30.8
200	27.6	26.8	39.8	56.0	12.2	29.2	37.8	54.2	10.2	27.4	21.8	36.6	18.8	34.6	18.0	30.0
250	31.1	30.1	38.3	54.3	7.3	24.2	36.3	52.5	5.3	22.3	19.8	34.6	16.8	32.6	17.3	30.5
300	34.3	33.1	37.1	53.1	2.9	19.9	35.1	51.2	0.9	18.1	18.3	33.1	15.3	31.2	16.8	31.1
350	37.2	36.0	36.1	51.8	-1.1	15.8	34.1	49.9	-3.1	13.9	16.9	31.9	13.9	29.9	16.3	31.7
400	40.1	38.8	35.3	50.8	-4.8	12.0	33.3	48.8	-6.8	10.0	15.8	30.6	12.8	28.6	15.9	31.5
500	45.3	43.6	33.8	47.9	-11.4	4.3	31.8	45.8	-13.4	2.2	13.8	28.7	10.8	26.7	15.2	32.0
550		43.8		48.0		4.1		45.9		2.0		28.6		26.7		31.9
650		50.2		43.5		-6.7		41.5		-8.8		25.7		23.5		25.3

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

884039854/16 | CS44Z3 ORG C6A 4/23 F/UTP RL 500M

Material Specifications

Conductor Material	Bare copper
Drain Wire Material	Tinned copper
Insulation Material	Polyolefin
Jacket Material	Low Smoke Zero Halogen (LSZH)
Separator Material	Polyolefin
Shield (Tape) Material	Polyester/Aluminum shield

Mechanical Specifications

Pulling Tension, maximum	11.34 kg | 25 lb

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)
Acid Gas Test Method	IEC 60754-2
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s2
EN50575 CPR Cable EuroClass Droplets Rating	d2
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Low Smoke Zero Halogen (LSZH)
Flame Test Method	IEC 60332-3-22
Smoke Test Method	IEC 61034-2

Packaging and Weights

Cable weight	52.309 kg/km | 35.15 lb/kft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system