

CS37R ETL Verified Category 6 U/UTP Cable, non-plenum, red jacket, 4 pair count, 1000 ft (305 m) length, CommPak

#### Product Classification

Regional AvailabilityNorth AmericaPortfolioUniprise®

Product Type Twisted pair cable

General Specifications

**Product Number** CS37R

ANSI/TIA Category 6

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorRed

Note All electrical transmission tests include swept frequency measurements

Pairs, quantity 4

Separator Type Isolator

Transmission Standards ANSI/TIA-568.2-D | CENELEC EN 50288-6-1 | ISO/IEC 11801 Class E

**Dimensions** 

 Cable Length
 304.8 m | 1000 ft

 Diameter Over Insulated Conductor
 1.054 mm | 0.041 in

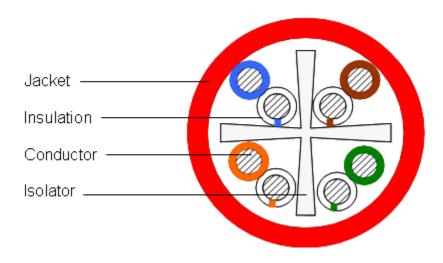
 Diameter Over Jacket, nominal
 5.766 mm | 0.227 in

 Jacket Thickness
 0.508 mm | 0.02 in

Conductor Gauge, singles 23 AWG

Cross Section Drawing





#### **Electrical Specifications**

**Characteristic Impedance** 100 ohm

dc Resistance Unbalance, maximum  $5\,\%$ 

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) 69%

**Operating Frequency, maximum** 400 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

#### Flectrical 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		
	cs	STD	ТҮР	cs	STD	ТҮР	cs	STD	ТҮР	cs	STD	TYP	cs	STD	TYP	cs	STD	TYP	cs	STD	ТҮР	cs	STD	TYP
1	2	2	1.8	77.3	74.3	90.3	75.3	72.3	88.5	75.3	72.3	88.1	73.3	70.3	86.3	68.8	67.8	84.1	65.8	64.8	82.6	20	20	32
4	3.8	3.8	3.6	68.3	65.3	82.7	64.5	61.5	79.1	66.3	63.3	80.4	62.5	59.5	76.8	56.8	55.8	72.7	53.8	52.8	71.4	23.6	23	30
8	5.3	5.3	5.1	63.8	60.8	78.1	58.5	55.4	72.9	61.8	58.8	75.8	56.5	53.4	70.6	50.7	49.7	66.9	47.7	46.7	65.5	25.4	24.5	34.3
10	5.9	6	5.8	62.3	59.3	76.5	56.4	53.3	70.7	60.3	57.3	74.3	54.4	51.3	68.5	48.8	47.8	65	45.8	44.8	63.6	26	25	34.9
16	7.5	7.6	7.3	59.2	56.2	73.5	51.7	48.7	66.1	57.2	54.2	71.3	49.7	46.7	64	44.7	43.7	61	41.7	40.7	59.5	26	25	35.2
20	8.4	8.5	8.2	57.8	54.8	72	49.4	46.3	63.8	55.8	52.8	69.8	47.4	44.3	61.6	42.8	41.8	59	39.8	38.8	57.6	26	25	35
25	9.4	9.5	9.2	56.3	53.3	70.3	46.9	43.8	61	54.3	51.3	68.2	44.9	41.8	58.9	40.8	39.8	57.1	37.8	36.8	55.7	25.3	24.3	36.1
31.25	10.6	10.7	10.3	54.9	51.9	68.9	44.3	41.2	58.6	52.9	49.9	66.8	42.3	39.2	56.5	38.9	37.9	55.2	35.9	34.9	53.8	24.6	23.6	36.4
62.5	15.3	15.4	14.8	50.4	47.4	63.8	35.1	32	49	48.4	45.4	61.7	33.1	30	46.8	32.9	31.9	49	29.9	28.9	47.6	22.5	21.5	34.1
100	19.7	19.8	19	47.3	44.3	60.5	27.6	24.5	41.6	45.3	42.3	58.3	25.6	22.5	39.3	28.8	27.8	44.7	25.8	24.8	43.3	21.1	20.1	32.4
155	25	25.2	23.9	44.4	41.4	58.6	19.5	16.3	34.7	42.4	39.4	56.3	17.5	14.3	32.4	25	24	41.3	22	21	39.8	19.8	18.8	30
200	28.8	29	27.4	42.8	39.8	55.4	14	10.8	28	40.8	37.8	53.3	12	8.8	26	22.8	21.8	38.5	19.8	18.8	37.1	19	18	29.3
250	32.6	32.8	30.8	41.3	38.3	54	8.7	5.5	23.2	39.3	36.3	51.9	6.7	3.5	21	20.8	19.8	36.5	17.8	16.8	35	18.3	17.3	28.3
300	36.2		34	40.1		52.2	4		18.2	38.1		50.2	2		16.2	19.3		34.6	16.3		33.1	17.8		28.2
350	39.5		37	39.1		50.9	-0.4		14	37.1		48.9	-2.4		12	17.9		33	14.9		31.4	17.3		28.1
400	42.7		39.7	38.3		49.9	-4.4		10.2	36.3		47.9	-6.4		8.2	16.8		30.9	13.8		29.4	16.9		28.6
500			45.2			47.5			2.3			45.5			0.3			26.9			25.2			28.5
550			44.9			50.9			6			48.8			3.9			28.7			27.3			33.6
650			49.8			46.4			-2.5			44.2			-5.6			23.3			21.5			25.3

#### Material Specifications

Conductor MaterialBare copperInsulation MaterialPolyolefinJacket MaterialPVC

Separator Material Polyolefin

Mechanical Specifications

**Pulling Tension, maximum** 11.34 kg | 25 lb

**Environmental Specifications** 



Installation temperature  $0 \,^{\circ}\text{C}$  to +60  $^{\circ}\text{C}$  (+32  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to +60  $^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

Environmental Space Non-plenum

Temperature Rating, UL 75 °C | 167 °F

Flame Test Method CMR | NEC Article 800 | UL 1666 | UL 444

Packaging and Weights

**Cable weight** 36.639 kg/km | 24.62 lb/kft

Packaging TypeCommPak® box

Regulatory Compliance/Certifications

Agency Classification

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

