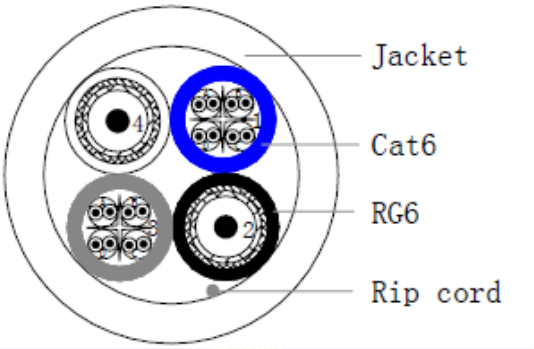
(2) Cat 6E + (2) RG6 Quad Composite Cable



Description

Two 4 Pair Cat6E UTP Cable
Complies to TIA 568-C.2
23 Awg Solid Bare Copper Conductor / PE Insulation

Two RG6 Quad Shield Coaxial Cable
Complies to SCTE ISP-IP-001
18 Awg Copper Clad Steel (CCS)
Al foil / 60% Al-Mg alloy Braid Shield +
Al foil / 40% Al-Mg alloy Braid Shield

Applicable Standards

For use in Home Network Systems
Reference Standard
SCTE IPS-SP-001, TIA-568-C.2

Physical Characteristics

CAT6E UTP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2
Nominal Weight	**110 lbs.**

Cable Marking

2CAT6E 550 MHZ + 2RG6U/18 AWG QUAD CMR/CATVR VERIFIED TO C(ETL)US XXXXXX CATV SWEPT TO 3.0 GHZ ***FT

Electrical Performance

CAT6E UTP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2

Electrical Characteristics

CAT6E UTP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2

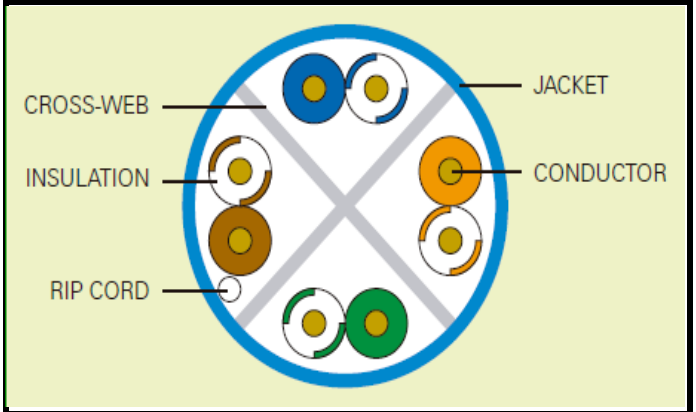
Mechanical Characteristics

	Test Object		**Outer Jacket**
	Test Material		PVC
Before	Tensile Strength	(Mpa)	>=1.034
Aging	Elongation	(%)	>=200
	Aging Condition	(°C x hrs)	113.0 ± 1.0 x 168
After	Tensile Strength	(Mpa)	>=85% unaged
Aging	Elongation	(%)	>=50% unaged
	Cold Bend	(-20 ± 2°C x 4 hrs)	No crack

Part Numbers

Part #	**Color**		**Put-up**
	Green	**500'**	**Reel**

(2) Cat6E + (2) RG6 Quad
Attachment 1



Description

23 AWG CAT6E CMR, High-Performance Data Cable

Applicable Standards

- ETL Listed Type CMR
- C(ETL) listed CMG FT4
- ETL Verified to TIA - 568-C.2, and ISO/IEC 11801
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

Physical Characteristics

Number of Conductor Pairs	4
Size	23 AWG
Stranding	Solid
Conductor Material	Solid Annealed Bare Copper
Shield Material	Unshielded
Rip Cord	Yes
Insulation Material	Polyethylene
Insulation Overall Diameter	0.040 in. ± 0.0002 in
Insulation Average Thickness	0.0088 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.023 in.
Outer Jacket Nominal O.D.	0.244 in. ± 0.008 in.

Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strenth	Before	> = 13.8 Mpa
Elongation	Aging	> = 100%
Aging Condition		100°C x 168 hours
	After	> = 85% of unaged
	Aging	> = 50% of unaged

Color Code

Pair 1	White / Blue	Blue
Pair 2	White / Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown

Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.0	20.0	77.3	75.3
4	3.8	23.6	68.3	66.3
8	5.3	25.4	63.8	61.8
10	5.9	26.0	62.3	30.3
16	7.4	26.0	59.3	57.3
20	8.3	26.0	57.8	55.8
25	9.3	25.5	56.3	54.3
31.25	10.4	25.0	54.9	52.9
62.5	14.9	23.5	50.4	48.4
100	19.0	22.5	47.3	45.3
155	23.9	21.6	45.8	43.5
200	27.4	21.0	42.8	40.8
250	30.8	20.5	41.3	39.3
300	34.0	20.1	40.2	38.2
350	37.0	19.8	39.2	37.2
400	39.7	19.5	38.3	36.3
450	42.1	19.2	37.5	35.5
500	44.9	19.0	36.8	34.8
550	47.3	18.8	36.2	34.2

Frequency (MHz)	ELFEXT Min. (dB)	PS-ELFEXT Min. (dB)	ACR Min. (dB)	PS-ACR Min. (dB)
1	70.8	67.8	75.0	73.0
4	58.7	55.7	64.0	62.0
8	52.7	49.7	57.7	55.7
10	50.8	47.8	55.6	53.6
16	46.7	43.7	50.7	48.7
20	44.7	41.7	48.2	16.2
25	42.8	39.8	45.6	13.6
31.25	40.9	37.9	42.8	40.8
62.5	34.8	31.8	32.9	30.9
100	30.8	27.8	24.9	22.9
155	27.0	23.6	21.0	21.5
200	24.7	21.7	18.4	16.4
250	22.8	19.8	13.5	11.5
300	21.2	18.2	9.6	5.0
350	19.9	16.9	5.2	3.2
400	18.7	15.7	1.5	-
450	17.7	14.7	-	-
500	16.8	13.8	-	-
550	15.9	12.9	-	-

* Values above 250MHz are information only

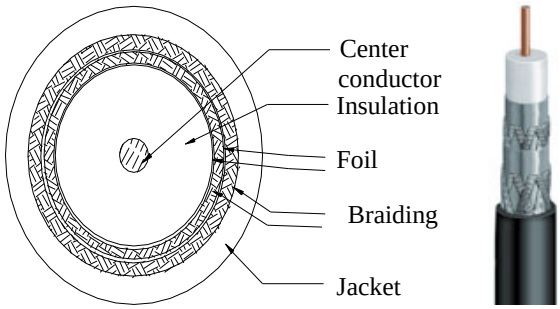
Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Maximum Pair-to-Pair Ground Capacitance Unbalance	330 pF / 100 Meters
Characteristic Impedance	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Maximum Delay Skew	40 nS / 100 Meters

Cable Marking

CATEGORY 6E 550MHZ 23AWG 4 PR UTP CMR C(ETL)US XXXXXX ETL LISTED & VERIFIED TO TIA/EIA - 568C.2 ****FT

(2) Cat6E + (2) RG6 Quad
Attachment 2



Electrical Performance

Frequency (MHz)	Attenuation (dB/100m)	Frequency (MHz)	Attenuation (dB/100m)
1	0.89	1000	22.00
10	2.90	1200	24.60
50	5.25	1450	27.20
100	7.20	1800	30.50
200	9.84	2200	32.80
400	14.10	2400	32.83
700	19.00	3000	37.88
900	21.00		

Description

RG-6/U QUAD CATV 75 Ω Coaxial Cable

Applicable Standards

Reference Standard

SCTE IPS-SP-001

UL 1655, UL 13, UL 444, ROHS

Physical Characteristics

Conductor		**C.C.S.**
AWG		18
Diameter	(inches)	0.04
Insulation		**Skin Foamed PE**
Nom. Thickness	(inches)	0.073
Insulation Diameter	(inches)	0.186
First Braid Shield		**Aluminum**
Coverage Area	(%)	60
Second Braid Shield		**Aluminum**
Coverage Area	(%)	40
Jacket		**FR-PVC**
Cable Diameter	(inches)	0.2968
Nom. Thickness	(inches)	0.0255

Electrical Characteristics

Temperature Rating	(°C)	-20 to 60
Impedence	(± 3.0 Ohms)	75
Capacitance	(pF/ft)	15.5
Conductor DCR@20° C	(ohms/1000ft)	28.6
Velocity of Propagation	(%)	84
ROHS Compliant		Yes

Cable Marking

RG6/U QUAD SHIELD 18AWG CMR VERIFIED TO C(ETL)US
XXXXXX CATV SWEPT TO 3.0 GHZ ****FT