

### Electrical Performance

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

### 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

### Electrical Characteristics

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

### Applicable Standards

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

### Physical Characteristics

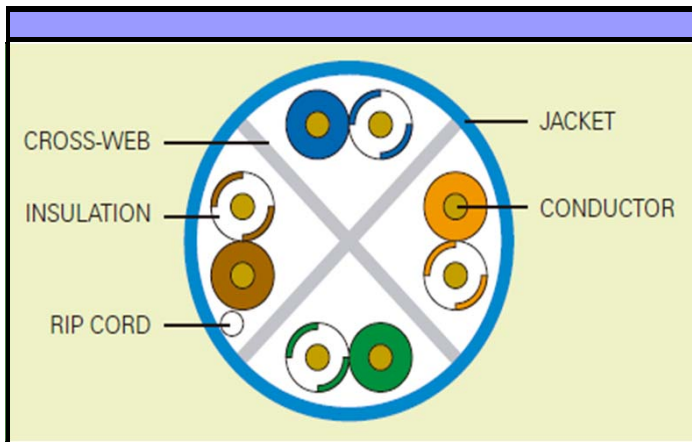
CAT6E UTP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2

### Cable Marking

H26E26QMGN 2CAT6E 550MHZ + 2RG6U/18 AWG QUAD  
CMR/CATVR FT4 VERIFIED TO C(ETL)US XXXXXXX CATV  
SWEPT TO 3.0 GHZ \*\*\* FT

### Part Numbers

Part #	Color	Put-up
	Green	500' Reel



### 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.
Nominal Weight	30 lbs.

### Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strength	Before	> = 13.8 Mpa
	Aging	> = 100%
Elongation	100°C x 168 hours	> = 85% of unaged
	After 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)	Return loss (dB)	NEXT (dB)	PS-NEXT (dB)
	Max.	Min.	Min.	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	-	-

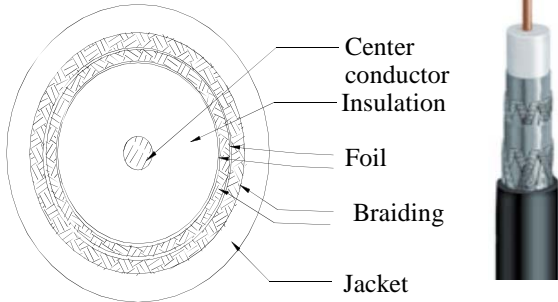
\* Values above 250MHz are information only

### 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 Unbalanced	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 FT4  
ETL LISTED & VERIFIED TO TIA/EIA - 568B.2 \*\*\*FT



**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**

<b>Conductor</b>		<b>C.C.S.</b>
AWG		18
Diameter	(inches)	0.04

<b>Insulation</b>		<b>Skin Foamed PE</b>
Nom. Thickness	(inches)	0.073
Insulation Diameter	(inches)	0.186
<b>First Braid Shield</b>		<b>Aluminum</b>
Coverage Area	(%)	60
<b>Second Braid Shield</b>		<b>Aluminum</b>
Coverage Area	(%)	40

<b>Jacket</b>		<b>FR-PVC</b>
Cable Diameter	(inches)	0.2968
Nom. Thickness	(inches)	0.0255

**Cable Marking**

**RG6/U QUAD SHIELD 18AWG CMR FT4 VERIFIED TO C(ETL)US  
XXXXXXXX CATV SWEPT TO 3.0 GHZ \*\*\*FT**

**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		

**Electrical Characteristics**

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