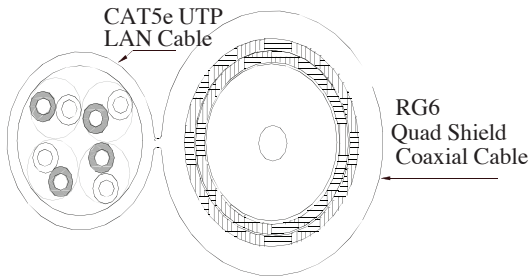


Cat 5E + RG6 Quad Composite Cable



Electrical Performance

CAT5E UTP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2

Description

One 4 Pair Cat5E UTP Cable
Complies to TIA 568-C.2
 24 Awg Solid Bare Copper Conductor / PE Insulation

One 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

CAT5E 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

CAT5E TUP LAN CABLE	For details, please see Attachment 1
RG6 Quad Shield Coaxial Cable	For details, please see Attachment 2

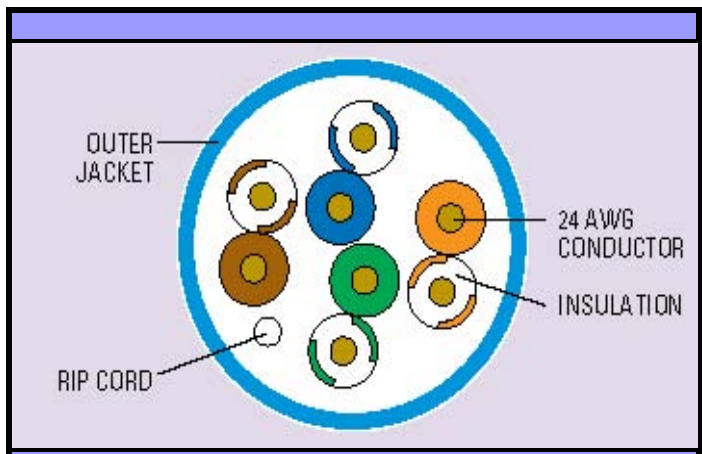
Cable Marking

CMR FT4 CAT5E 350MHZ 4 PR 24 AWG AND RG6 QUAD TYPE
CMR FT4 18 AWG C(ETL)US XXXXXXX SWEPT TO 3.0 GHZ
RM A B C D E F 1 2 3 4 5 6 7 8 *FT**

Part Numbers

Part #	Color	Put-up
	Blue	500' Reel

Cat5E + RG6 Quad Attachment 1



Description

24 AWG Cat5E 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 100BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

Physical Characteristics

Number of Conductor Pairs	4
Size	24 AWG
Stranding	Solid
Conductor Material	Solid Annealed Bare Copper
Shield Material	Unshielded
Rip Cord	Yes
Insulation Material	Polyethylene
Insulation Overall Diameter	0.035 in. ± 0.0002 in.
Insulation Average Thickness	0.0081 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.023 in.
Outer Jacket Nominal O.D.	0.200 in. ± 0.008 in.
Nominal Weight	20 lbs.

Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strength	Before	> = 13.8 Mpa
Elongation	Aging	> = 100%
Aging Condition		100°C x 240 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)		Return loss (dB)		NEXT (dB)		PS-NEXT (dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	1.8	1.5	23.0	33.0	72.0	81.1	70.0	78.7
1	2.0	1.8	23.0	38.6	70.3	79.4	68.3	76.9
4	4.1	3.6	23.0	39.8	61.2	69.9	59.3	67.4
8	5.8	5.1	24.5	38.2	56.8	61.9	54.8	59.4
10	6.5	5.8	25.0	38.0	55.3	62.4	53.5	59.9
16	8.2	7.4	25.0	37.4	52.3	57.8	50.3	55.2
20	9.3	8.2	25.0	36.8	50.8	56.4	48.8	53.8
25	10.4	9.3	24.3	35.2	49.3	56.3	47.3	53.6
31.25	11.7	10.5	23.6	33.3	47.9	53.8	45.9	51.1
62.5	17.0	14.9	21.5	32.2	43.4	49.8	41.4	47.4
100	22.0	19.2	20.1	31.3	40.3	47.5	38.3	45.0
155	28.1	24.2	18.8	29.8	37.4	45.1	35.4	42.6
200	32.4	27.3	18.0	28.5	35.7	43.3	33.7	40.2
250	38.9	30.9	17.5	27.3	34.8	41.4	32.5	39.0
300	41.0	34.1	16.8	25.6	33.1	40.2	31.1	37.7
350	44.9	37.8	16.3	23.2	32.1	39.0	30.1	36.5

Frequency (MHz)	ELFEXT (dB)		PS-ELFEXT (dB)		ACR (dB)		PS-ACR (dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	66.0	73.3	63.0	72.7	70.2	79.2	68.2	77.0
1	63.8	71.3	60.8	70.6	68.2	77.6	66.3	75.0
4	51.7	59.4	48.7	58.7	57.2	66.3	55.2	63.5
8	45.7	53.2	42.7	51.1	51.0	59.8	49.0	56.9
10	43.8	50.5	40.8	49.7	48.8	56.6	47.0	53.7
16	39.7	47.0	36.7	45.1	43.0	53.0	42.1	47.4
20	39.7	45.0	34.7	43.6	41.5	50.5	39.5	45.0
25	35.8	43.3	32.8	42.0	38.9	47.0	36.9	43.7
31.25	33.9	41.3	30.9	40.5	36.5	43.3	34.2	40.0
62.5	27.8	35.8	24.8	34.5	26.4	35.0	24.4	31.2
100	23.8	31.3	20.8	30.3	18.3	26.2	16.3	24.2
155	19.9	27.5	16.9	26.9	10.0	20.9	7.3	15.9
200	17.7	24.7	14.7	24.5	5.0	16.0	2.0	10.0
250	17.1	22.2	14.0	22.5	0.0	10.6	-	4.0
300	16.7	20.5	13.5	20.7	-	6.1	-	-1.3
350	16.0	19.4	12.8	19.6	-	1.2	-	-6.4

* Values above 100MHz are information only

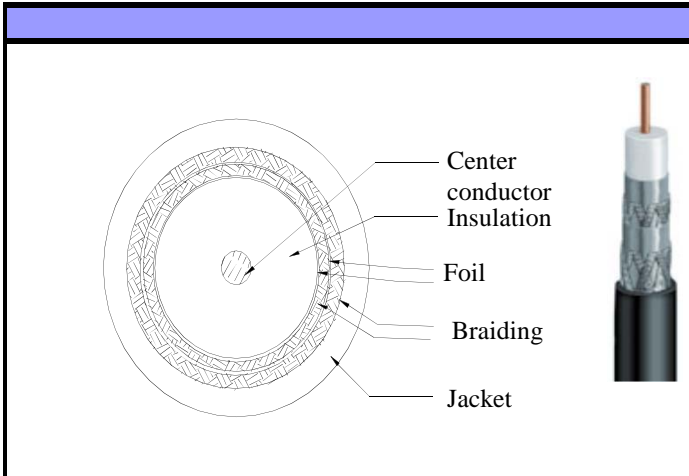
Electrical Characteristics

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 (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Maximum Delay Skew	40 nS / 100 Meters

Cable Marking

CATEGORY 5E 350MHZ 24AWG 4 PR UTP CMR C(ETL)US XXXXXX
FT4 ETL LISTED & VERIFIED O TIA/EIA - 568B.2 ***FT

Cat5E + RG6 Quad Attachment 2



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		Polyethylene
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