

Color

Outer Jacket Color:
Per Customer Request

Outer Jacket Marking

E223070 (UL) CM 2 x 18AWG + 2 x 4pr x 24AWG 75C --- C(UL) CMG 2 x 18AWG + 2 x 4pr x 24AWG 75C --- ***** FEET

Performance

The Characteristics of RG6 and CAT5e refer to attachment

Description

Rated Temperature (°C)	75
Product Standard Certification	UL file E223070
Flammability Test	CM,CMG

Two 4 Pair CAT5e UTP Cables
Complies to TIA/EIA 568A
24AWG Solid Bare Copper Conductor / PE Insulation

Two RG6 Quad Shield Coaxial Cables
Complies to SCTE ISP-IP-001
18AWG Copper Clad Steel Conductors
Al foil / 60% Al Braid Shield + Al foil / 40% Al Braid Shield

Application
Multi-media Cables for Smart Home

Reference Standard
SCTE IPS-SP-001, TIA/EIA-568-A & TIA/EIA-570A

Outer Jacket Mechanical Characteristics:

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

Construction

2xCAT5E UTP LAN Cable
Detail See Attachment 1

2xRG6 Quad Shield Coaxial Cable
Detail See Attachment 2

Cabling Lay Length(±100mm)	350
PET Tape Wrapping	

Outer Jacket	PVC
Average Thickness(±0.05mm)	0.9
Min. Point Thickness(mm)	0.75
Outer Dia.(±0.5mm)	18.0
Rip Cord	Yes

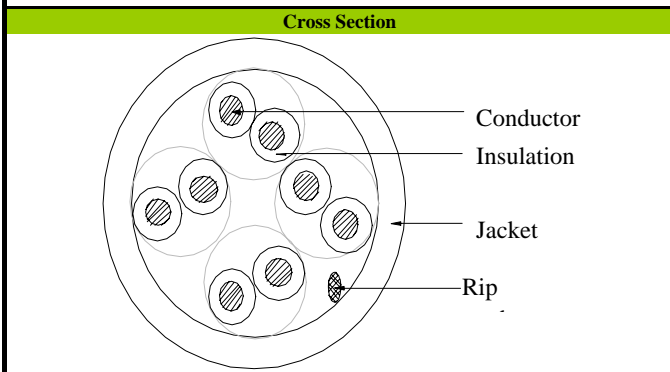
Weight(kg/km)	151.1
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Part No.: 20306

Ref. spec No. : HYBRI-004 Rev.: 1

Revision History

Prepared by: David Kim 2006.2.4 A046 Rev.:2
Approved by: Kevin Chang 2006.2.4 Page 1 of 3



Marking

E223070 (UL) CMR 4PR 24AWG UTP 75C --- C(UL) CMR 4PR 24AWG UTP 75C --- (UL) VERIFIED ENHANCED CATEGORY 5 ***** FEET

Description

Reference Standard

UL Subject 444,EIA/TIA568-A & ISO/IEC 11801

Construction

Conductor	Solid Bare Copper
AWG	24
Conductor Dia. (+0.008/-0.01mm)	0.49
Insulation	PE
Average Thickness(±0.03mm)	0.21
Min. Point Thickness(mm)	0.17
Insulation Dia.(±0.03mm)	0.93
Twisting Lay Length(mm)	30underneath
Cabling Lay Length(±20mm)	140
Inner Jacket	PVC
Average Thickness(±0.05mm)	0.5
Min. Point Thickness(mm)	0.43
Cable Dia.(±0.2mm)	4.7
Rip Cord	Yes

Color

Insulation colors are:
 Blue, White/Blue
 Orange, White/Orange
 Green, White/Green
 Brown, White/Brown
Inner Jacket colors:
 Blue, Green

Part No.: 20306

Ref. spec No.: HYBRI-004 Rev.: 1

Revision History

Performance

Electrical Characteristics:

Frequency (MHz)	Return loss (dB)	Attenuat (dB/100)	NEX (dB)	ACR (dB)
0.772	19.4	1.8	67.0	65
1	20.0	2.0	65.3	63
4	23.0	4.1	56.3	52
8	24.5	5.8	51.8	46
10	25.0	6.5	50.3	44
16	25.0	8.2	47.3	39
20	25.0	9.3	45.8	37
25	24.3	10.4	44.3	34
31.25	23.6	11.7	42.9	31
62.5	21.5	17.0	38.4	21
100	20.1	22.0	35.3	13
200	18.0	32.4	34.7	2.3
250	17.3	36.9	29.3	0.0
300	16.8	41.0	28.2	-
350	16.3	44.9	27.2	-

Mechanical Characteristics:

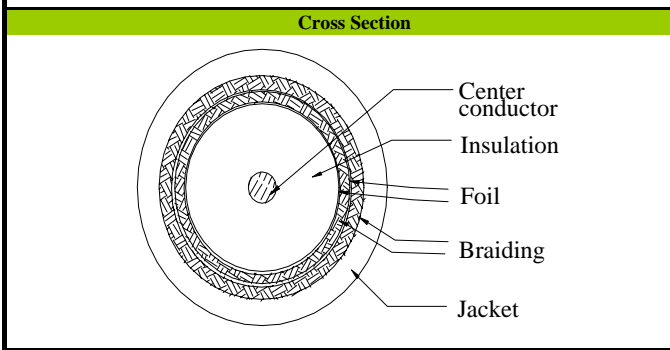
Frequency (MHz)	PSNEXT (dB)	ELFEXT/ELFE. (dB/100m B/100m)	Prop'n Delay (ns/100m)
0.772	64.0	66.0	63.0
1	62.3	63.8	60.8
4	53.3	51.7	48.7
8	48.8	45.7	42.7
10	47.3	43.8	40.8
16	44.3	39.7	36.7
20	42.8	37.7	34.7
25	41.3	35.8	32.8
31.25	39.9	33.9	30.9
62.5	35.4	27.8	24.8
100	32.3	23.8	20.8
200	27.8	17.7	14.7
250	26.3	15.8	12.8
300	25.2	14.2	11.2
350	24.2	12.9	9.9

3.0-350 MHZ impedance (ohms)	100 ± 15
3.0-350 MHZ Delay Skew (ns/100m)	>=45
Pair-to-Ground Capacitance Unbalance (pF/100)	>=330
Max. Conductor DC Resistance 20°C (ohms/km)	93.8
Resistance Unbalance (%)	>=5

Mechanical Characteristics:

Test Object	Inner Jacket
Test Material	PVC
Before Tensile Strength (Mpa)	>=13.8
Aging Elongation (%)	>=100
Aging Condition (°Cxhrs)	100x240
After Tensile Strength (Mpa)	>=85% of unaged
Aging Elongation (%)	>=50% of unaged
Cold Bend(-20±2°Cx4hrs)	No crack

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Marking
 E223070 (UL) CM RG-6/U QUAD SHIELD 18 AWG 75C --- CATV RG-6/U QUAD SHIELD 18AWG 75C ***** FEET

Description
Reference Standard
 UL1655, UL13, UL444

Construction	
Center Conductor	Copper Clad Steel
AWG	18
Dia.	1.02
Insulation	Skin Foam PE
Nom. Thickness(mm)	1.78
Insulation Dia. (±0.08mm)	4.57
The first Al-maylar Shield (Overlapping, %)	>=25
The first Braid Shield	Aluminium Wire
Construction (mm)	16/4/0.16
Coverage Area (%)	>=60
The Second Al-maylar Shield (Overlapping, %)	>=25
The Second Braid Shield	Aluminium Wire
Construction (mm)	16/3/0.16
Coverage Area (%)	>=40
Inner Jacket	PVC
Nom. Thickness (mm)	0.65
Min. Thickness(mm)	0.55
Cable Dia.(±0.15mm)	7.30

Color
Inner Jacket Color:
 White,Black
Part No.: 20306

Ref. spec No. : HYBRI-004 Rev.: 1

Revision History

Performance

Electrical Characteristics:

Frequency (MHz)	Attenuation (dB/100m)
1	0.89
10	2.66
50	4.79
100	6.72
200	9.28
400	13.28
700	18.36
900	20.43
1000	21.61
1200	23.67
1450	26.03
1800	28.98
2200	32.03
2400	32.83
3000	37.88

Dielectric Strength (kV/min)	1.0
Impedence (±3.0ohms)	75.0
SRL (dB,5~1000MHz)	>=20
Capacitance (pF/m)	53.1
Conductor DCR@ 20oC (ohms/km)	<=21.4
Nom. Velocity Of Propagation (%)	82

Mechanical Characteristics:

Test Object		Inner Jacket
Test Material		PVC
Before Tensile Strength (Mpa)		>=1.034
Aging Elongation (%)		>=200
Aging Condition (°C×hrs)		113.0±1.0 × 168
After Tensile Strength (Mpa)		>= 85% unaged
Aging Elongation (%)		>= 50% unaged
Cold Bend (-20±2°C×4hrs)		No crack
Inner Jacket impact test(-15°C)		No crack
Inner Jacket Longitudinal Shrinkage (%)		<=5
Center Conductor Break Strength (N)		>=641
Center Conductor Bond To dielectric (N)		>=2.3

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