Caleb
Cable

TELECOMMUNICATION CABLE
2009

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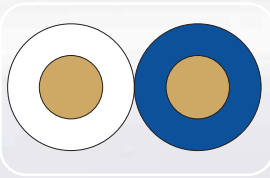
TELEPHONE CABLE

Of Jumper Wire



Application

For communication and Telephone systems.

General

- ☑ 2002/95/EC (RoHS) as per 1 July 2005
- ☑ 2003/11/EC (BFR) as per august 2004
- ☑ 2002/96/EC (WEEE) as per August 2005

Cable Construction

Cross Connect	Jumper Wire(PA) 1X2X0.5	Jumper Wire 1X2X0.5
Multi-construction	1 Pair(2 Cores)	1 Pair(2 Cores)
Conductor Material/Dia.(mm)	Tinned Copper/T0.50	Bare Copper/0.50
Insulation 1/Thickness/Dia.(mm)	PVC/0.15/0.93	SR-PVC/0.28/1.05
Insulation 2/Thickness/Dia.(mm)	PA/0.06/1.13	---
Insulation Color	Yellow,Green Each pair is twisted, unshielded	Green/Black-white or Yellow/Green Each pair is twisted, unshielded
Packaging	200m/400m/Reel Cardboard	100m/200m/400m 1000m/Reel Cardboard

Electrical Characteristics (PA 1X2X0.5)

Max.Conductor DC Resistance at 20℃(Ω/Km)	<93
Dielectric Strength Insulation	1kv AC for 1 min
Min.Insulation DC Resistance at 20℃(GΩ*Km)	200
Elongation Conductor	>15%
Tensile Strength PVC Insulation at 50% Elongation	>15N/mm²
Tensile strength PA Covering	>18N/mm²
Accelerated Aging at 100℃ 72 hrs According to ICE189-7	no cracks
Shrinkage of Insulation(PVC+PA)at 150C for 15 min	<4%
Coldbend test at -15℃(4hrs)According toICE189-7	no cracks
Heatshock Test 150℃(1hr)According to ICE189-7	no cracks
Flame Properties	According to N65
Temperature Range (operating and processing)	-25~70℃
Temperature Range (storage)	-40~70℃

Electrical Characteristics (1X2X0.5)

Max. Conductor DC Resistance at 20℃ (Ω/Km)	<94.8
Rated Temperature (℃)	-20~105
Rated Voltage (V)	300
Min. Insulation DC Resistance at 20℃ (MΩ*Km)	50
Rated Abrasion(Cycles)	>75
Specific Gravity	1.33
Tensile Strength (Mpa)	>=28.3
Elongation (%) 20 in/Min	>=230
Cold Bend (-20+/-2℃x 4Hrs)	no cracks
Heat Shock (105+/-2℃x 2Hrs)	no cracks
Volume Resistivity, Dry (ohm-cm)	5.00E+12
Dielectric Strength (Volts/mil)	700
Dielectric Constant (at 1000 Hz)	3.3

TELEPHONE CABLE

Of CW 1308（Conductor - 0.4, 0.5, Bare Copper)

Cable Construction （ Conductor-0.5 mm)

Number of Pairs	Conductor Size&Type (AWG Bare Copper)	Sheath Thickness (Minimum - mm)	Maximum Sheath (O.D. mm)	Sheath Material
3	3 Pairs x 2- 24 AWG	0.65	5.00	PVC
4	4 Pairs x 2- 24 AWG	0.65	5.80	PVC
6	6 Pairs x 2- 24 AWG	0.60	6.80	PVC
10	10 Pairs x 2- 24 AWG	0.60	8.30	PVC
12	12 Pairs x 2- 24 AWG	0.70	9.10	PVC
15	15 Pairs x 2- 24 AWG	0.70	9.80	PVC
20	20 Pairs x 2- 24 AWG	0.80	10.70	PVC
25	25 Pairs x 2- 24 AWG	0.80	11.40	PVC
40	40 Pairs x 2- 24 AWG	0.90	15.00	PVC
50	50 Pairs x 2- 24 AWG	1.00	17.00	PVC
80	80 Pairs x 2- 24 AWG	1.20	22.50	PVC
100	100 Pairs x 2- 24 AWG	1.50	27.00	PVC
160	160 Pairs x 2- 24 AWG	1.70	30.30	PVC
320	320 Pairs x 2- 24 AWG	2.20	39.50	PVC

Electrical Characteristics

Max.Conductor DC Resistance at 20℃（Ω/Km）	<97.8
Operating Temperature(℃)	-20~80
Operating Voltage Uo/U (V)	<100
Min.Insulation DC Resistance at 20℃（GΩ*Km）	>200
Mutual Capacitance (pF/M)	appr.64
Pair-to pair Capacitance Unbalance (pF/M)	appr.500
Test Voltage (V)	500
Minimum Bending Radius	10¢

Materials Mechanical Characteristics

Test Material	PVC
Elongation (%)	>=125
Tensile Strength (Mpa)	>=12.5
Cold Bend (-20 +/- 2 ℃ x 1Hrs)	No Crack
Heat Shock (80 +/- 2 ℃ x 2Hrs)	No Crack

Packaging	100/200/500/1000M/2000M (or According to Customer)

TELEPHONE CABLE

Of CW 1293(Conductor - 0.4, 0.5, 0.6, 0.9mm Bare Copper)

Cable Construction(Conductor-0.4 mm)

Number of Pairs	Conductor Size&Type (AWG Bare Copper)	Sheath Thickness (Minimum - mm)	Maximum Sheath (O.D. mm)	Sheath Material
1	1 Pairs x 2- 24 AWG	0.4	3.30	PVC
3	3 Pairs x 2- 24 AWG	0.5	5.30	PVC
6	6 Pairs x 2- 24 AWG	0.6	1.90	PVC
10	10 Pairs x 2- 24 AWG	0.6	8.30	PVC
12	12 Pairs x 2- 24 AWG	0.7	8.90	PVC
16	16 Pairs x 2- 24 AWG	0.7	9.80	PVC
20	20 Pairs x 2- 24 AWG	0.7	10.40	PVC
25	25 Pairs x 2- 24 AWG	0.8	11.10	PVC
40	40 Pairs x 2- 24 AWG	0.9	13.80	PVC
50	50 Pairs x 2- 24 AWG	0.9	14.10	PVC
60	60 Pairs x 2- 24 AWG	1.0	15.80	PVC
72	72 Pairs x 2- 24 AWG	1.1	17.30	PVC
100	100 Pairs x 2- 24 AWG	1.2	20.10	PVC

Electrical Characteristics

Max.Conductor DC Resistance at 20℃（Ω/Km）	<153
Operating Temperature(℃)	-20~80
Operating Voltage Uo/U (V)	<100
Min.Insulation DC Resistance at 20℃（GΩ*Km）	>200
Mutual Capacitance (pF/M)	appr.64
Pair-to pair Capacitance Unbalance (pF/M)	appr.200
Test Voltage (V)	500
Minimum Bending Radius	10¢

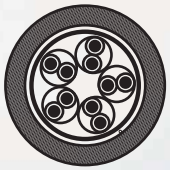
Materials Mechanical Characteristics

Test Material	PVC
Elongation (%)	>=125
Tensile Strength (Mpa)	>=12.5
Cold Bend (-20 +/- 2 ℃ x 1Hrs)	No Crack
Heat Shock (80 +/- 2 ℃ x 2Hrs)	No Crack

Packaging	100/200/500/1000M/2000M (or According to Customer)

TELEPHONE CABLE

Of CW 1128



Cable Construction (Jelly Filled & Jelly Tape Spiral)

Number of Pairs	Conductor Size&Type (AWG BCorTC)	Cable Construction (No. of pairs or subunits)	Nominal Sheath (O.D. mm)	Sheath Material
5	5 Pairs x 2- 24 AWG	5 Pairs	7.80	PE
10	10 Pairs x 2- 24 AWG	2 Pairs+8Pairs	9.20	PE
20	20 Pairs x 2- 24 AWG	4 x (5Pairs x 2)	11.6	PE
30	30 Pairs x 2- 24 AWG	3 x (10Pairs x 2)	14.0	PE
50	50 Pairs x 2- 24 AWG	5 x (10Pairs x2)	16.0	PE
100	100 Pairs x 2- 24 AWG	2 x(10Pairsx2)+8x(10Pairsx2)	21.0	PE

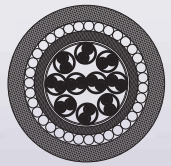
Electrical Characteristics

Max.Conductor DC Resistance at 20℃（Ω/Km）	<93.8
Operating Temperature(℃)	-20~70
Operating Voltage Uo/U (V)	100
Min.Insulation DC Resistance at 20℃（GΩ*Km）	>200
Mutual Capacitance (pF/M)	appr.64
Pair-to pair Capacitance Unbalance (pF/M)	appr.275
Test Voltage (V)	1000
Minimum Bending Radius	10¢Cable

Packaging	100/200/500/1000M (According to Customer)

TELEPHONE CABLE

Of CW 1198



Cable Construction (Jelly Filled & Jelly Tape Spiral)

Number of Pairs	Conductor Size&Type (AWG BCorTC)	Cable Construction (No. of pairs or subunits)	Inner Sheath (PE O.D. mm)	Outer Sheath (PE O.D. mm)
5	5 Pairs x 2- 24 AWG	2 Pairs+8 Pairs	9.20	15.0
10	10 Pairs x 2- 24 AWG	4 x (5 Pairs x 2)	11.6	17.4
20	20 Pairs x 2- 24 AWG	3 x (10Pairs x 2)	14.0	19.8
30	30 Pairs x 2- 24 AWG	5 x (10Pairs x2)	16.0	21.8
50	50 Pairs x 2- 24 AWG	7 x (10Pairs x2)	18.6	24.8
100	100 Pairs x 2- 24 AWG	2 x(10Pairsx2)+8x(10Pairsx2)	21.0	27.8

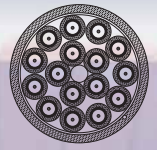
Electrical Characteristics

Max.Conductor DC Resistance at 20℃（Ω/Km）	<93.8
Operating Temperature(℃)	-20~70
Operating Voltage Uo/U (V)	100
Min.Insulation DC Resistance at 20℃（GΩ*Km）	>200
Mutual Capacitance (approximate value pF/M)	appr.64
Pair-to pair Capacitance Unbalance (approximate value pF/M)	appr.275
Test Voltage (V)	1000
Minimum Bending Radius	10¢Cable

Packaging	100/200/500/1000M (According to Customer)

TELECOM MULTI-CORE

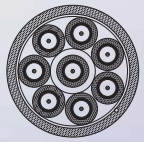
coaxial cables



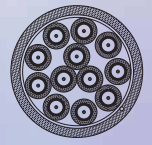
Cable Construction

Caleb code	CC 7000	CC 8000
Construction/Stranded Dia.(mm)	1X0.61/0.61	1X0.31/0.31
Insulation Layer/Insulation Dia.(mm)	FPE/2.80	FPE/1.45
Braiding Construction(mm)/Braid coverage(%)	T0.12X16X7/>93%	T0.10X16X5/>95%
Jacket Material/Dia.(mm)	LSZH/4.50	LSZH/2.75

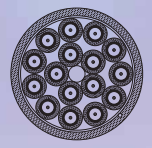
4 Cores



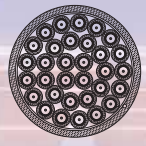
8 Cores



12 Cores



16 Cores



32 Cores

Electrical Characteristics

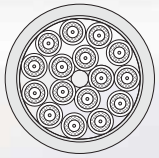
Max.Conductor DC Resistance at 20℃(Ω/Km)	<64.8	<251.2
Min.Insulation DC Resistance at 20℃(GΩ*Km)	20000	1000
Rated Temperature(℃)	-20~70	70
Rated Voltage(V)	30	30
Velocity Ratio(%)	82	82
Impedance(Ω)	75±3	75±3
Attenuation at 20℃(-dB/100m) (+/-8%)		
1 MHz	1.21	2.30
4 MHz	2.50	4.77
5 MHz	2.60	---
17 MHz	4.95	9.80
60 MHz	9.00	—
69 MHz	9.15	17.27
78 MHz	9.65	18.06

■ **Caleb Cable is able to design and produce 4 cores, 8 cores, 12 cores, 16 cores, 32 cores coaxial cables as per the custoner's reguirements.**

Caleb code	CC 7000	CC 8000	Packaging
4 Cores	13.00±0.20	---	250M/Wooden Drum
8 Cores	17.20±0.20	11.00±0.4	250M/Wooden Drum
12 Cores	21.50±0.20	---	250M/Wooden Drum
16 Cores	24.25±0.80	14.85±0.40	250M/Wooden Drum
32 Cores	—	20.55±0.50	250M/Wooden Drum (According to the Customer)

TELECOM MULTI-CORE

coaxial cables



Cable Construction

Caleb code	3002	2003	2002	2001
Construction/Stranded Dia.(mm)	1X0.31/0.31	1X0.61/0.61	1X7X0.20/0.61	1X7X0.20/0.61
Insulation Layer/Thickness/Insulation Dia.(mm)	SPE/0.85/1.95	SPE/1.55/3.70	FPE/0.90/2.40	FPE/0.92/2.45
Braiding construction(mm)/Braid coverage(%)	T0.10X16X5/>92%	0.15X24X5/93%	0.15X16X5/94%	0.15X16X5/>94%
Jacket material/Thickness/Dia.(mm)	PCV/0.50/3.55	PCV/0.70/6.70	LSZH/1.01/5.10	LSZH/0.75/4.4

Electrical Characteristics

Max.Conductor DC Resistance at 20℃(Ω/Km)	<246.5	<61	<84	<84.6
Min.Insulation DC Resistance at 20℃(GΩ*Km)	>100	20000	>100	>100
Rated Temperature(℃)	80	80	70	80
Rated Voltage(V)	30	30	30	300
Velocity ratio(%)	66.6%±0.03	66.6%±0.03	83%±0.03	82%±0.03
Impedance(Ω)	75±3	75±3	75±3	75±3
Attenuation at 20℃(-dB/100m) (+/-8%)				
5 MHz	4.8	<2.6	4.0	4.0
60 MHz	—	<9.0	—	—
100 MHz	—	—	17.3	17.0
200 MHz	—	—	23.0	23.0
500 MHz	—	—	41.0	41.0

■ **Caleb Cable is able to design and produce 4 cores, 8 cores, 16 cores coaxial cables as per the custoner's reguirements.**

Caleb code	3002	2003	2002
4 Cores Jacket Dia(mm)	10.20	18.50	14.80
8 Cores Jacket Dia(mm)	16.00	26.00	20.00
16 Cores Jacket Dia(mm)	19.50	35.50	27.80
Packaging	200m/500m/1000m/Wooden drum		

COMMUNICATION CABLE

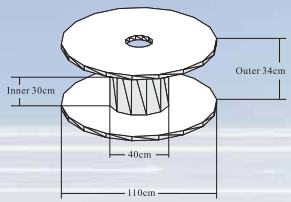
Of ADSL.XDSL Cable

Cable Construction

Multi-Construction	5X5pairs(50 Core)	4X8pairs(64 Core)	4XUnit(24 Pairs)	100Pairs(200 Cores)
Conductor AWG/Dia.(mm)	24/0.492	24/0.492	26/0.40	24/0.50
Insulation material/Insulation Dia.(mm)	HDPE/0.95	HDPE/0.95	PE/0.74	HDPE/0.90
Total Mylar Spiral/Nylon rip cord	>=115%	>=115%	>115%	>115%
Jacket material/Dia.(mm)	LSZH/12.00	LSZH/13.50	PVC/19.0	LSZH/21.5

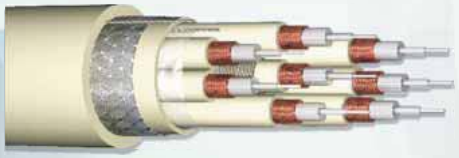
Electrical Characteristics

Max.Conductor DC Resistance at 20℃ (Ω/Km)	<97.9	<97.9	<148,1	<97.9
Mutual Capacitance(1 MHz)	<5.6nF/100m	<5.6nF/100m	<5.6nF/100m	<5.6nF/100m
Capacitance Unbalance(1 MHz)	<=330pF/100m	<=330pF/100m	<=330pF/100m	<=330pF/100m
Impedance at 1 MHz	100Ω	100Ω	100Ω	100Ω
Insulation Resistance(GΩ*Km)	>2000	>2000	>2000	>2000
Test Voltage	1000V DC/min	1000V DC/min	1000V DC/min	1000V DC/min
Minimum Bending Radius	12¢	12¢	12¢	12¢
Packaging	1000m/Wooden Drum, According to customer.			



TELECOMMUNICATION CABLE

Of Coaxial Cable 8 Cores



Application

1. Applied in the data transmission of the 2Mbps data interface between digital program and controlled switches.

2. Can also be used in the data wiring of digital interface of 155/122Mbps

3. High transmission rate, high capacity of resisting disturbance widely used in the communication industry and wireless products

Cable Construction(mm)

Inner Conductor	Silver-Plated Copper	1/0.254
Insulation Diameter(1)	Teflon	0.55
Insulation Diameter(2)	PE	1.50
Shield	Bare Copper braiding	90%
Armoured Shield	Tinned Copper braiding	90%
Inner Sheath 1	LSOH	2.60±0.1X8 C
Inner Sheath 2	LSOH	9.85±0.3
Jacket Diameter		11.9±0.2

Cable code	FLEX 2-75	FLEX 3-75
Construction/Dia.	21Coax X0.29/0.29	16Coax X0.40/0.40
Insulation Thickness/ Dia.	0.705/1.70	0.95/---
braid Coverage	90%	85%
Jacket 1 Thickness/Dia.	0.25/2.70/3.30	0.30/3.30
Total Dia.	17.0	18.0

Electrical Characteristics

Max.Conductor DC Resistance at 20℃ (Ω/Km)	<379
Min. Insulation DC Resistance at 20℃ (MΩ/Km)	10
Impedance(Ω)	75±3
Rated Temperature(℃)	-40~70
Capacitance(pF/m)	66±3
Test voltage(V)	1500
Velocity ratio(%)	67
Attenuation at 20℃(-dB/100m) (+/-8%)	
10 MHz	9

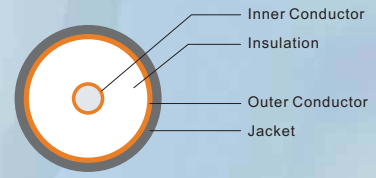
Max.Conductor DC Resistance at 20℃ (Ω/Km)	<335	<144
Max.Outer DC Resistance at 20℃ (Ω/Km)	<35	<24
Min. Insulation DC Resistance at 20℃ (MΩ/Km)	<10000	<10000
Rated Temperature(℃)	80	80
Rated voltage(V)	30	30
Capacitance(pF/m)	70±5	70±5
Velocity ratio(%)	66.7%	66.7%
Impedance(Ω)	75±3	75±3
Attenuation at 20℃(-dB/100m) (+/-8%)		
1.024 MHz	2.46	2.10
4.224 MHz	5.60	4.10
17.184 MHz	10.35	5.50
34.386 MHz	14.51	10.50
70 MHz	18.95	14.60

Note:

Cable type	Conductor	Insulation	General OD	Transfer Charalteristics	
SYV-75-1-8	1/0.254 Tinned copper	PE	10.00 mm	Impedance	75±3Ω
SYV-75-1-8	1/0.320 Tinned copper	PE	11.00 mm		
SFYFZ	1/0.320 Silver Plated copper	Teflon+PE	11.00 mm	Attenuation	Max 4.2dB/100M@2MHz

TELECOMMUNICATION CABLE

Of Helix Copper Tube Coaxial Cable



Application

Mainly used in the connection of the transmitter, receiver, and antenna for the system of wireless communication, cell phones, microwave transmission and broadcast transmission; Low attenuation and low SWR

Cable Construction(mm)

Construction		1/4"S HCAHY -50-5	3/8"S HCAHY -50-7	3/8"S HCAAY -50-8	1/2"S HCAHY -50-9	1/2"S HCAAY -50-12	7/8"S HHTAY -50-21	7/8"S HCTAY -50-22	7/8" HHTAY -50-23
Inner Conductor	Material	CCA					Helix tube	Smooth copper tube	
	Diameter	1.9	2.6	3.1	3.55	4.83	9.4	9.0	9.45
Insulation	Material	Foam PE							
	Diameter	5.0	7.0	8.0	9.0	12.0	22.0	22.0	23.0
Outer Conductor	Material	Helix Copper Tube				Ring Copper Tube			
	Diameter	6.4	9.0	9.5	11.9	13.9	24.9	24.9	25.4
Jacket	Material	PE Jacket or LSOH Jacket							
	Diameter	7.3	10.0	11.0	13.6	16.0	27.8	27.8	28.1

Mechanical Characteristics

Type	1/4"S	3/8"S	3/8"	1/2"S	1/2"	7/8"S	7/8"	7/8"
Max Tensile Resistance(N)	680	950	1100	800	1130	1020	1500	1700
Compressive Resistance(N/mm)	18	18	20	19	20	14	14	14
Minimum Bending Radius(single)(mm)	12	15	30	17	80	90	140	150
Minimum Bending Radius(repeated)(mm)	25	50	100	55	125	130	250	275
Installation Temperature(℃)	-20 ~ 60							
Operating Temperature(℃) PE Jacket	-40 ~ 70							
Operating Temperature(℃) LSOH Jacket	-25 ~ 70							

TELECOMMUNICATION CABLE

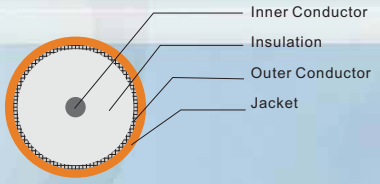
Of Helix Copper Tube Coaxial Cable

Electrical characteristics

Cable Models		1/4"S	3/8"S	3/8"	1/2"S	1/2"	7/8"S	7/8"	7/8"低
Impedance(Ω)		50±1	50±1	50±1	50±1	50±1	50±1	50±1	50±1
Velocity Ratio(%)		83	82	88	81	88	88	88	88
Capacitance(pF/m)		80	82	76	83	76	76	76	76
Max Work Frequency(GHz)		20.4	13.4	13	10.2	8.8	5	5	4.9
Pack Power Rating (KW)		8.2	13.5	15.6	19	58	90	91	99.5
Inner Conductor Impedance(Ω/km)		10.45	5.3	4.19	2.97	1.62	2.97	1.2	1.4
Outer Conductor Impedance(Ω/km)		7.2	4.5	3.08	3.54	2.08	1.31	1.2	1.19
Dielectric Strength(DC.V)		2000	2500	2500	2500	6000	6000	10000	10000
Max.attenuation (20℃)dB/100m	50MHz	4.58	3.06	2.59	2.35	1.52	0.96	0.833	0.82
	150MHz	8.07	5.40	4.58	4.21	2.67	1.69	1.47	1.45
	450MHz	14.22	9.70	8.16	7.59	4.75	3.03	2.65	2.60
	800MHz	19.22	13.29	11.13	10.4	6.46	4.14	3.63	3.57
	900MHz	20.45	4.19	11.86	10.6	6.90	4.42	3.96	3.81
	1000MHz	21.62	15.12	12.57	11.5	7.28	4.70	4.02	4.06
	1500MHz	26.84	18.94	15.72	14.35	9.09	5.87	5.18	5.08
	1800MHz	29.6	21.03	17.41	16.0	10.1	6.51	5.75	5.65
	2000MHz	31.33	22.35	18.48	17.2	10.7	6.92	6.11	6.00
	2200MHz	32.98	23.64	19.52	18.2	11.2	7.15	6.46	6.37
	2400MHz	34.59	24.86	20.5	19.18	11.8	7.69	6.80	6.67
	3000MHz	39.08	23.37	23.3	22.4	13.4	8.76	7.76	7.16
Average power rating(KW)	50MHz	1.76	3.06	3.03	4.42	4.98	9.47	10.8	10.8
	150MHz	1.00	1.74	1.72	2.49	2.79	5.36	6.17	6.14
	450MHz	0.537	0.975	0.97	1.38	1.56	2.99	3.34	3.44
	800MHz	0.419	0.715	0.71	1.01	1.17	3.81	2.48	2.53
	900MHz	0.39	0.642	0.67	0.898	1.05	1.96	2.30	2.40
	1000MHz	0.37	0.634	0.63	0.889	1.02	1.94	2.20	2.24
	1500MHz	0.299	0.507	0.50	0.71	0.83	1.54	1.74	1.79
	1800MHz	0.271	0.457	0.46	0.634	0.74	1.39	1.58	1.60
	2000MHz	0.256	0.431	0.43	0.597	0.70	1.31	1.49	1.52
	2200MHz	0.243	0.409	0.41	0.564	0.673	1.24	1.40	1.50
	2400MHz	0.231	0.387	0.39	0.534	0.651	1.18	1.32	1.31
	3000MHz	0.204	0.342	0.34	0.469	0.55	1.04	1.16	1.21
Max. voltage SWR	400-500	⩽1.15							
	800-1000	⩽1.15							
	1700-2200	⩽1.15							
Third-order intermodulation dBc		⩾155							

TELECOMMUNICATION CABLE

Of RF Mobile Cable



Application

Compliant with MIL-C-17; Easy to install and flexible;Low attenuation and high-frequency signal transmission;Widely used in wireless, microwave measuring equipment.

Cable Construction

Inner Conductor/Stranded Dia.(mm)	Silver Plated Copper/1X0.92/0.92
Insulation Layer/Insulation Dia.(mm)	PTFE/2.98
Concentricity(%)	>90
Outer conductor/Dia.(mm)	Tinned after Braiding/3.25
Jacket material/Thickness/Dia.(mm)	LSOH/0.55/4.40

Electrical Characteristics

Max. Conductor DC Resistance at 40℃ (Ω/Km)	<28.5
Rated Temperature(℃)	-55~125
Max. Test Voltage(V)	1.9
Capacitance(pF/m)	95.1
Velocity Ratio (%)	70%
Impedance(Ω)	50
Screening Attenuation(dB)	100
Delay(ns/m)	4.7
Min. Bending Radius(once)(mm)	8
Min. Bending Radius(repeat)(mm)	40
SWR	<1.25

Attenuation and Watts CW at 20℃

Frequency(GHz)	Attenuation(-dB/m)	Watts CW
0.5	0.26	436.5
1	0.39	303.4
5	0.92	126.7
10	1.38	85.5
20	2.10	56.6

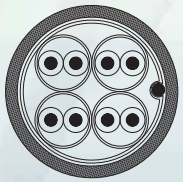
RoHS GUIDELINE

We operate according to the following standards

Contro Item	Standard	Testing Method	Testing Equipment
Cadmium content(Cd)	<0.01%	EN1122	ICP-AES
Lead content(Pb)	<0.1%	EPA3050B	ICP-AES
Mercury content(Hg)	<0.1%	EPA3052	ICP-AES
Chromium(VI)content	<0.1%	EPA3060(UN-VIS)	ICP-AES
Polybrominated Biphenyls(PBB)	Forbidden	GC/MS	
Polybrominated Diphenyl Ether(PBDE)	Forbidden	GC/MC	

TELECOMMUNICATION CABLE

Of IP298/IP299/ IP900



Grade 1 IP298 100MHz
Grade 2 IP299 250MHz
Grade 3 IP900 2200MHz

Cable link to the end user made of 4 shielded twisted pairs with and overall shield :

- ☑ Analog and digital signals for television transmission (VHF/UHF, HDTV, TNT) ;
- ☑ Transmission of the satellite signal up to 2200 MHz -Multimedia (video, games,...);
- ☑ Telephony.

This cable is particularly used to transmit the satellite signal and is compliant with Grade 3 standard. Simultaneous applications depend on UTE C90493 guide.

Cable Construction

Cable Code	IP298(Grade 1)	IP299(Grade 2)	IP900(Grade 3)
Inner Conductor Material/Stranded Dia.(mm)	Bare copper/0.46±0.008	Bare copper/0.5±0.008	Bare copper/0.56±0.01
Dielectric Material/Dia.(mm)	HDPE/0.85	HDPE/1.15±0.008	FPE/1.40
Color	According to the customer	According to the customer	According to the customer
Construction	Each pair is twisted, unshield	Each pair is twisted, unshield	Each 2 cores are twisted with Individual Al-Foil 100% Screen
Al Foil Coverage(%)	115%	>=115%	115%
Drain wire Material/Dia.(mm)	---	Tinned Copper/T0.5	Tinned copper/T0.5
Sheath Material	PVC	PVC	PVC
Dia.(mm)	4.8±0.15	6.80±0.15	7.80±0.15

Electrical Characteristics

Max. Conductor DC Resistance at 40℃ (Ω/Km)	<112	<87.8	<70.4
Rated Temperature(℃)	80	80	-20~60
Rated voltage(V)	300	15000	1000
20℃ Insulation Resistance(MΩ*M)	>500	>5000	—
Impedance(Ω)	100±15	100~120	100±15

Standard and Directive

- ☑ Cable : NFC 93 531-14 (Grade 3) compatibility
- ☑ Cabling : UTE C 90483 guide
- ☑ Installation : NFC 15-100
- ☑ Directive : ROHS 2002/95/EC
- ☑ LSOH jacket : IEC 60332-1, NF C 32-070 2.1 (C2).