



增强六类线

◎ 应用:

10Base-T4, 100Base-TX, 100Base-VG-ANYLAN, 155MbpsATM, 622 Mbps ATM, 1000Base-T, 10GBase-T

◎ 标准:

ISO / IEC 11801, EN50173, TIA / EIA 568-B

◎ 电缆结构:

	U/UTP	F/UTP	U/FTP	SF/UTP	S/FTP
导体	23AWG单股纯铜	23AWG单股纯铜	223AWG单股纯铜	23AWG单股纯铜	23AWG单股纯铜
绝缘	PE	PE	PE	PE	PE
屏蔽	无	铝箔总屏蔽	单对铝箔屏蔽	铝箔总屏蔽+铜丝编织总屏蔽	单对铝箔屏蔽+铜丝编织总屏蔽
排流线	无	1/0.5 mm	1/0.5 mm	无	无
护套	PE/PVC/LSF/LSZH/LFLSFR0H	PE/PVC/LSF/LSZH	PE/PVC/LSF/LSZH/LSFR0H		

备注: PE-聚乙烯; PVC-聚氯乙烯; LSF-低烟低卤; LSOH-低烟无卤; LSFROH-高阻燃低烟无卤(IEC60332-3C); PVC分为CMX, CM, CMR及CMP级别

◎ 工作频宽:

1-500MHz

◎ 物理/电气特征:

☆ 物理阻抗: $100 \pm 15\Omega$ (1-250MHz); $100 \pm 22\Omega$ (100-500MHz)

☆ 额定传输速率 (NVP): CMX, CM, CMR, LSZH 69%; CMP 72%

☆ 最大相对互耦电容: 5.6nF/100m

☆ 最大电容不平衡: 330pF/100m

☆ 最大导体直流电阻: $7.5\Omega/100m$

☆ 最大直流电阻不平衡: 3%

☆ 最大传播延迟差: 30ns/100m (1-125MHz)

☆ 最大传播延迟: 536 ns/100m @ 100MHz

☆ 最小弯曲半径: 10 x Overall 直径

☆ 最大抗拉荷载: 80N

☆ 工作温度: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

☆ 储存温度: $-5^{\circ}\text{C} \sim +50^{\circ}\text{C}$


☆ 阻燃:

UL 1581 (CM 护套); UL 1666 (CMR 护套)

UL 910 (CMP 护套); IEC 60332-1 (FRPVC & LSZH 护套);

IEC 60332-1 & IEC 60332-3C (LSFR0H 护套)

◎ 产品认证:

E222756 



◎ 电缆结构参数:

结构	导体线径 (mm)	绝缘线径 (mm)	对数	屏蔽	成品线径 (mm)	护套
U/UTP	0.57/0.58	1.02	4	无	8.5	PVC/LSZH
U/UTP	0.57/0.58	1.02	4	无	8.9	LSFROH
U/UTP	0.57/0.58	1.02	4	无	8.7	PE
F/UTP	0.57/0.58	1.02	4	铝箔总屏蔽	6.3	PVC/LSZH
F/UTP	0.57/0.58	1.02	4	铝箔总屏蔽	6.5	PE
U/FTP	0.57/0.58	1.02	4	单对铝箔屏蔽	7.5	PVC/LSZH
SF/UTP	0.57/0.58	1.02	4	铝箔屏蔽总屏蔽+铜丝编织总屏蔽	6.6	PVC/LSZH
SF/UTP	0.57/0.58	1.02	4	铝箔屏蔽总屏蔽+铜丝编织总屏蔽	7.2	LSFROH
S/FTP	0.57/0.58	1.02	4	单对铝箔屏蔽+铜丝编织总屏蔽	8.0	PVC/LSZH
S/FTP	0.57/0.58	1.02	4	单对铝箔屏蔽+铜丝编织总屏蔽	8.4	LSFROH

◎ 产品特点:

- ☆ 提供的串扰和衰减的带宽远超过标准要求的 500MHz。
- ☆ 支持 10 Gigabit 以太网应用条件。
- ☆ 符合欧洲和美国的防火和环保要求。
- ☆ 多种护套材料可选择。
- ☆ 可根据用户要求订做特殊护套或用途的线缆。
- ☆ 多种护套颜色可选择。

◎ UTP Cat 6A 电气性能参数:

频率 (MHz)	近端串扰 (dB/100m) 最差值/典型值/标准值	插入损耗 (dB/100m)	回波损耗 (dB/100m) 最差值/典型值/标准值	信噪比 (dB/100m) 最差值/典型值/标准值	等效远端串扰 (dB/100m) 最差值/典型值/标准值	近端串扰功率和 (dB/100m) 最差值/典型值/标准值	信噪比功率和 (dB/100m) 最差值/典型值/标准值	等效远端串扰功率和 (dB/100m) 最差值/典型值/标准值
1	74.3/95.0/74.3	2.0	20.0/28.0/20.0	72.2/94.0/72.2	67.8/92.0/67.8	72.3/92.0/72.3	70.2/90.0/70.2	64.8/85.0/64.8
4	65.3/88.0/65.3	3.7	23.0/30.0/23.0	61.4/88.0/61.4	55.8/80.0/55.8	63.3/83.0/63.3	59.5/80.0/59.5	52.8/73.0/52.8
8	60.8/85.0/60.8	5.3	24.5/33.0/24.5	55.4/83.0/55.4	49.7/75.0/49.7	58.8/80.0/58.8	53.5/76.0/53.5	46.7/70.0/46.7
10	59.3/83.0/59.3	5.9	25.0/36.0/25.0	53.3/78.0/53.3	47.8/72.0/47.8	57.3/77.0/57.3	51.3/72.0/51.3	44.8/65.0/44.8
16	56.2/80.0/56.2	7.6	25.0/36.0/25.0	48.6/74.0/48.6	43.7/68.0/43.7	54.2/74.0/54.2	46.6/68.0/46.6	40.7/61.0/40.7
20	54.8/78.0/54.8	8.3	25.0/36.0/25.0	46.3/71.0/46.3	41.8/65.0/41.8	52.8/73.0/52.8	44.3/66.0/44.3	38.8/59.0/38.8
25	53.3/77.0/53.3	9.5	24.3/35.0/24.3	43.8/69.0/43.8	39.8/63.0/39.8	51.3/71.0/51.3	41.8/63.0/41.8	36.8/57.0/36.8
31.25	51.9/76.0/51.9	10.4	23.6/34.0/23.6	41.1/67.0/41.1	37.9/62.0/37.9	49.9/70.0/49.9	39.1/60.0/39.1	34.9/55.0/34.9
62.5	47.4/70.0/47.4	14.9	21.5/33.5/21.5	31.9/57.0/31.9	31.9/56.0/31.9	45.4/65.0/45.4	29.9/51.0/29.9	28.9/49.0/28.9
100	44.3/68.0/44.3	19.0	20.1/33.0/20.1	24.4/50.0/24.4	27.8/52.0/27.8	42.3/62.0/42.3	22.4/44.0/22.4	24.8/45.0/24.8
200	39.8/65.0/39.8	27.4	18.0/31.0/18.0	10.6/38.0/10.6	21.8/46.0/21.8	37.8/58.0/37.8	8.6/32.0/8.6	18.8/39.0/18.8
250	38.3/62.0/38.3	31.0	17.3/30.5/17.3	5.3/33.0/5.3	19.8/44.0/19.8	36.3/56.0/36.3	3.3/27.0/3.3	16.8/37.0/16.8
300	37.1/61.0/37.1	34.2	16.8/29.0/16.8	0.5/29.0/0.5	18.3/42.0/18.3	35.1/55.0/35.1	-1.5/24.0/-1.5	15.3/35.0/15.3
350	36.1/60.0/36.1	37.1	16.3/28.0/16.3	-3.8/26.0/-3.8	16.9/41.0/16.9	34.1/54.0/34.1	-5.8/20.0/-5.8	13.9/34.0/13.9
400	35.3/59.0/35.3	40.0	15.9/27.0/15.9	-7.9/21.0/-7.9	15.8/40.0/15.8	33.3/53.0/33.3	-9.9/15.0/-9.9	12.8/33.0/12.8
450	34.5/58.0/34.5	46.3	15.5/26.5/15.5	-10.5/18.0/-10.5	14.7/40.5/14.7	32.5/52.0/32.5	-12.5/11.0/-12.5	11.7/32.5/11.7
500	33.8/57.0/33.8	45.3	15.2/26.0/15.2	-15.3/15.0/-15.3	13.8/39.0/13.8	31.8/51.0/31.8	-17.3/9.0/-17.3	10.8/32.0/10.8
625	32.4/53.0/32.4	51.1	14.5/25.0/14.5	-23.1/31.0/-23.1	11.8/36.0/11.8	30.4/50.0/30.4	-25.1/5.0/-25.1	8.8/29.0/8.8

* 250MHz 以上的数据仅供参考

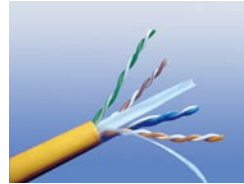
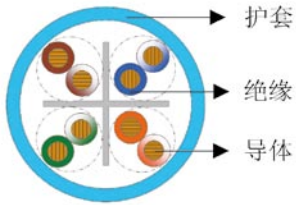


◎ F/UTP & SF/UTP Cat 6A 电气性能参数:

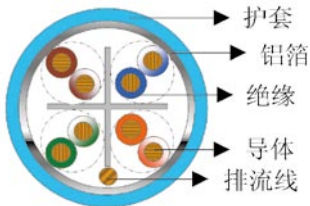
频率 (MHz)	近端串扰 (dB/100m) 最差值/典型值/ 标准值	插入损耗 (dB/100m)	回波损耗 (dB/100m) 最差值/典型值/ 标准值	信噪比 (dB/100m) 最差值/典型值/ 标准值	等效远端串扰 (dB/100m) 最差值/典型值/ 标准值	近端串扰功率和 (dB/100m) 最差值/典型值/ 标准值	信噪比功率和 (dB/100m) 最差值/典型值/ 标准值	等效远端串扰功率和 (dB/100m) 最差值/典型值/ 标准值
1	74.3/86.0/74.3	2.0	20.0/33.0/20.0	72.2/84.0/72.2	67.8/91.0/67.8	72.3/81.0/72.3	70.2/80.5/70.2	64.8/84.0/64.8
4	65.3/77.0/65.3	3.7	23.0/35.5/23.0	61.4/73.0/61.4	55.8/79.0/55.8	63.3/72.0/63.3	59.5/70.0/59.5	52.8/72.0/52.8
8	60.8/75.0/60.8	5.3	24.5/36.0/24.5	55.4/70.0/55.4	49.7/74.0/49.7	58.8/69.0/58.8	53.5/66.0/53.5	46.7/69.0/46.7
10	59.3/71.0/59.3	5.9	25.0/38.0/25.0	53.3/66.0/53.3	47.8/71.0/47.8	57.3/65.0/57.3	51.3/62.0/51.3	44.8/64.0/44.8
16	56.2/68.0/56.2	7.6	25.0/35.2/25.0	48.6/61.0/48.6	43.7/67.0/43.7	54.2/62.0/54.2	46.6/58.0/46.6	40.7/60.0/40.7
20	54.8/67.0/54.8	8.3	25.0/35.0/25.0	46.3/59.0/46.3	41.8/65.0/41.8	52.8/61.0/52.8	44.3/55.0/44.3	38.8/59.0/38.8
25	53.3/65.0/53.3	9.5	24.3/34.0/24.3	43.8/57.0/43.8	39.8/63.0/39.8	51.3/60.0/51.3	41.8/53.0/41.8	36.8/57.0/36.8
31.25	51.9/64.0/51.9	10.4	23.6/33.1/23.6	41.1/54.0/41.1	37.9/61.0/37.9	49.9/54.0/49.9	39.1/50.0/39.1	34.9/54.0/34.9
62.5	47.4/59.0/47.4	14.9	21.5/32.2/21.5	31.9/44.0/31.9	31.9/55.0/31.9	45.4/58.0/45.4	29.9/41.0/29.9	28.9/48.0/28.9
100	44.3/56.0/44.3	19.0	20.1/31.6/20.1	24.4/38.0/24.4	27.8/51.0/27.8	42.3/50.0/42.3	22.4/34.0/22.4	24.8/44.0/24.8
200	39.8/52.0/39.8	27.4	18.0/29.8/18.0	10.6/25.0/10.6	21.8/45.0/21.8	37.8/45.0/37.8	8.6/20.5/8.6	18.8/38.0/18.8
250	38.3/50.0/38.3	31.0	17.3/28.7/17.3	5.3/19.0/5.3	19.8/43.0/19.8	36.3/44.0/36.3	3.3/15.0/3.3	16.8/36.0/16.8
300	37.1/49.0/37.1	34.2	16.8/28.0/16.8	0.5/14.0/0.5	18.3/38.0/18.3	35.1/43.0/35.1	-1.5/10.0/-1.5	15.3/31.0/15.3
350	36.1/48.0/36.1	37.1	16.3/27.5/16.3	-3.8/9.0/-3.8	16.9/37.0/16.9	34.1/41.0/34.1	-5.8/7.0/-5.8	13.9/30.0/13.9
400	35.3/47.0/35.3	40.0	15.9/27.0/15.9	-7.9/7.0/-7.9	15.8/36.0/15.8	33.3/40.0/33.3	-9.9/3.0/-9.9	12.8/29.0/12.8
450	34.5/47.0/34.5	46.3	15.5/26.5/15.5	-10.5/6.0/-10.5	14.7/35.0/14.7	32.5/39.0/32.5	-12.5/2.0/-12.5	11.7/27.5/11.7
500	33.8/47.0/33.8	45.3	15.2/26.0/15.2	-15.3/5.0/-15.3	13.8/34.0/13.8	31.8/38.0/31.8	-17.3/0.0/-17.3	10.8/27.0/10.8
625	32.4/45.0/32.4	51.1	14.5/25.0/14.5	-23.1/1.0/-23.1	11.8/33.0/11.8	30.4/37.0/30.4	-25.1/-3.9/-25.1	8.8/26.0/8.8

◎ U/FTP & S/FTP Cat 6A 电气性能参数:

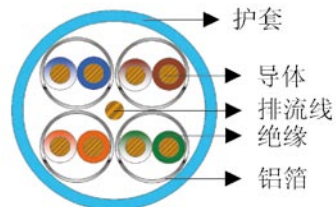
频率 (MHz)	近端串扰 (dB/100m) 最差值/典型值/ 标准值	插入损耗 (dB/100m)	回波损耗 (dB/100m) 最差值/典型值/ 标准值	信噪比 (dB/100m) 最差值/典型值/ 标准值	等效远端串扰 (dB/100m) 最差值/典型值/ 标准值	近端串扰功率和 (dB/100m) 最差值/典型值/ 标准值	信噪比功率和 (dB/100m) 最差值/典型值/ 标准值	等效远端串扰功率和 (dB/100m) 最差值/典型值/ 标准值
1	87.0/90.0/74.3	2.0	20.0/28.0/20.0	85.0/88.0/72.2	73.8/75.0/67.8	85.0/88.0/72.3	83.0/86.0/70.2	70.8/72.0/64.8
4	80.0/90.0/65.3	3.7	23.0/30.0/23.0	76.0/86.0/61.4	61.8/75.0/55.8	78.0/88.0/63.3	74.0/84.0/59.5	58.0/72.0/52.8
8	80.0/90.0/60.8	5.3	24.5/33.0/24.5	74.7/84.0/55.4	55.7/75.0/49.7	78.0/88.0/58.8	72.7/82.0/53.5	52.7/72.0/46.7
10	80.0/90.0/59.3	5.9	25.0/36.0/25.0	74.0/84.0/53.3	53.8/74.0/47.8	78.0/88.0/57.3	72.0/82.0/51.3	50.8/71.0/44.8
16	80.0/90.0/56.2	7.6	25.0/36.0/25.0	72.4/82.0/48.6	49.7/70.0/43.7	78.0/88.0/54.2	70.4/80.0/46.6	46.7/67.0/40.7
20	80.0/90.0/54.8	8.3	25.0/36.0/25.0	71.5/81.0/46.3	47.8/68.0/41.8	78.0/88.0/52.8	69.5/79.0/44.3	44.8/65.0/38.8
25	80.0/90.0/53.3	9.5	24.3/35.0/24.3	70.5/80.0/43.8	45.8/68.0/39.8	78.0/88.0/51.3	68.5/78.0/41.8	42.8/65.0/36.8
31.25	80.0/90.0/51.9	10.4	23.6/34.0/23.6	69.3/79.0/41.1	43.9/64.0/37.9	78.0/88.0/49.9	67.3/77.0/39.1	40.9/61.0/34.9
62.5	75.3/90.0/47.4	14.9	21.5/33.5/21.5	59.9/74.0/31.9	37.9/58.0/31.9	69.1/83.0/45.4	57.9/72.0/29.9	34.9/55.0/28.9
100	71.1/85.0/44.3	19.0	20.1/33.0/20.1	51.3/65.0/24.4	33.8/54.0/27.8	69.1/83.0/42.3	49.3/63.0/22.4	30.8/51.0/24.8
200	71.1/85.0/39.8	27.4	18.0/31.0/18.0	42.1/56.0/10.6	27.8/51.0/21.8	69.1/83.0/37.8	40.1/54.0/8.6	24.8/48.0/18.8
250	71.1/85.0/38.3	31.0	17.3/30.5/17.3	38.2/52.0/5.3	25.8/48.0/19.8	61.7/78.0/36.3	36.2/50.0/3.3	22.8/45.0/16.8
300	63.7/80.0/37.1	34.2	16.8/29.0/16.8	27.3/43.0/0.5	24.3/45.0/18.3	61.7/78.0/35.1	25.3/41.0/-1.5	21.2/42.0/15.3
350	63.7/80.0/36.1	37.1	16.3/28.0/16.3	23.9/40.0/-3.8	23.9/45.0/16.9	61.7/78.0/34.1	21.9/38.0/-5.8	19.9/42.0/13.9
400	63.7/80.0/35.3	40.0	15.9/27.0/15.9	20.7/37.0/-7.9	21.8/45.0/15.8	61.7/78.0/33.3	18.7/35.0/-9.9	19.7/42.0/12.8
450	63.7/80.0/34.5	46.3	15.5/26.5/15.5	17.4/33.0/-10.5	20.5/42.0/14.7	61.7/78.0/32.5	15.4/31.0/-12.5	17.5/39.0/11.7
500	63.7/80.0/33.8	45.3	15.2/26.0/15.2	14.8/31.0/-15.3	19.8/42.0/13.8	61.7/78.0/31.8	12.8/29.0/-17.3	16.8/39.0/10.8
625	60.0/70.0/32.4	51.1	14.5/25.0/14.5	5.5/15.5/-23.1	18.8/42.0/11.8	58.0/68.0/30.4	9.9/26.0/-25.1	16.0/39.0/8.8



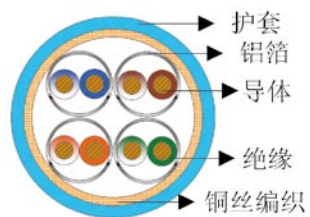
Cat6A U/UTP



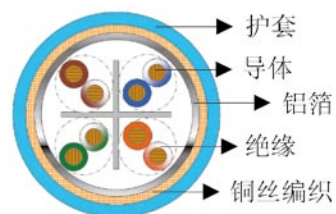
Cat6A F/UTP



Cat6A U/FTP



Cat6A S/FTP



Cat6A SF/UTP