

## FEATURES

- | Hour,Minute,Second,Month and Day normal display
- | 6digit chronograph:Auto ranging after 30 minutes to hour,minute,Second,from minute,second,1/100 second
- | Split operative stopwatch(Accurate to 1/100 second)
- | Use selectable 12/24 format & 4year calendar
- | Alarm function with 4 to 5minute snooze
- | Chime on every hour
- | One touch correction of time error within  $\pm 30$  seconds
- | Direct drive of piezo buzzer
- | Oscillating build-in capacitor
- | Alarm output driven by build-in transistor
- | Backlight(EL) control output

## 特点

- | 可显示时,分,秒,月,日及星期
- | 6位计时器:以分,秒,1/100秒计时显示方式计满30分钟后,自动转换至时,分,秒计时显示方式
- | 跑表有分段计时功能(准确到1/100秒)
- | 可选用12或24小时制4年日历
- | 具有间隔4至5分钟再闹的功能
- | 整点发声报时
- | 按键一次即可校正 $\pm 30$ 秒的时间误差
- | 可直接驱动压电蜂鸣片
- | 振荡器内置电容
- | 内置三极管驱动闹钟输出
- | 背光(EL)控制讯号输出

## ELECTRICAL CHARACTERISTICS 电特性 (VDD=3V, VSS=0V, TA=25°C unless otherwise specified)

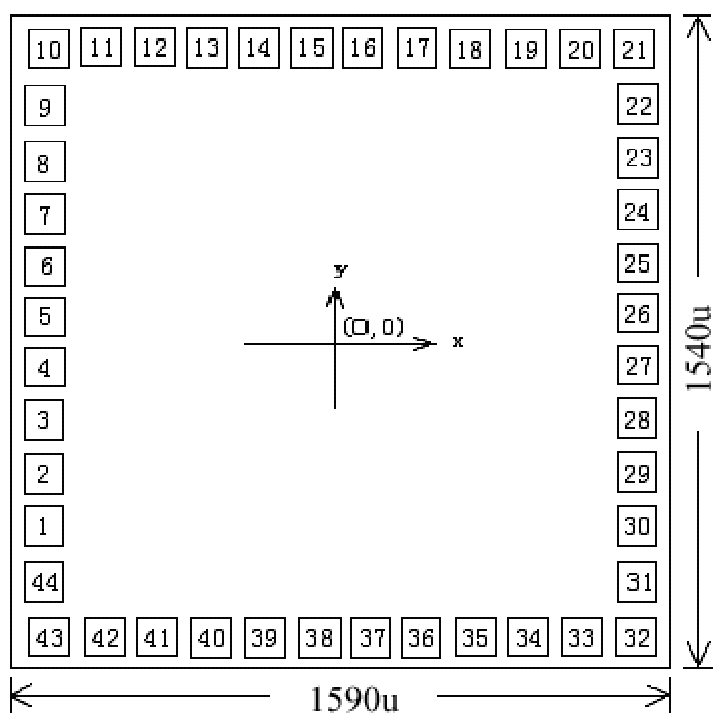
Parameter	Symbol	Test condition	Min	Type	Max	Unit
Operating Voltage 工作电压	VDD		2.4	3	3.6	V
Operating current 工作电流	IDD1	No load			2.0	$\mu$ A
Operating current 工作电流	IDD2	EL		8		mA
Input high voltage 输入高电压	VIH		VDD-0.3		VDD	V
Input low voltage 输入低电压	VIL		VSS		VSS+0.3	V
Switch activation current 按键开关消耗电流	ISW	VIN=VDD			5.0	$\mu$ A
Oscillation Start-up Voltage 起振电压	VOsc	Within 2seconds	2.4			V
Alarm drive current 闹铃驱动电流	IALA	VALA=0.5V	0.5	2.0		mA
Oscillating input capacitor 振荡频率	FOSC			32768		Hz
LCD frequency LCD频率	FLCD			32		Hz
Time stability 时间稳定度	TSTB	VDD=3V		1		ppm
Output current for IND,DIS 输出电流	IO	VO=0.5V	1			mA

AP

## APPLICATION INFORMATION 应用资料

Pad	Name	Pad	Name	Pad	Name	Pad	Name
1	OSCI	12	A1/SU	23	S	34	G5/D5
2	OSCO	13	C1/B1	24	T4	35	F5/E5
3	L	14	A2/MO	25	T3	36	B4/C4
4	DIS	15	CL/TU	26	VEE	37	G4/D4
5	IND	16	A3/WE	27	T2	38	F4/E4
6	GND	17	A4/TH	28	T1	39	B3/CC3
7	ALA1	18	A5/FR	29	VDD	40	G3/D3
8	ALA2	19	A6/SA	30	B6/C6	41	F3/E3
9	M	20	DM/AL	31	G6/D6	42	B2/C2
10	COM2	21	COM1	32	F6/E6	43	G2/D2
11	PM/AM	22	D	33	B5/C5	44	F2/E2

6693A 管脚排列图:



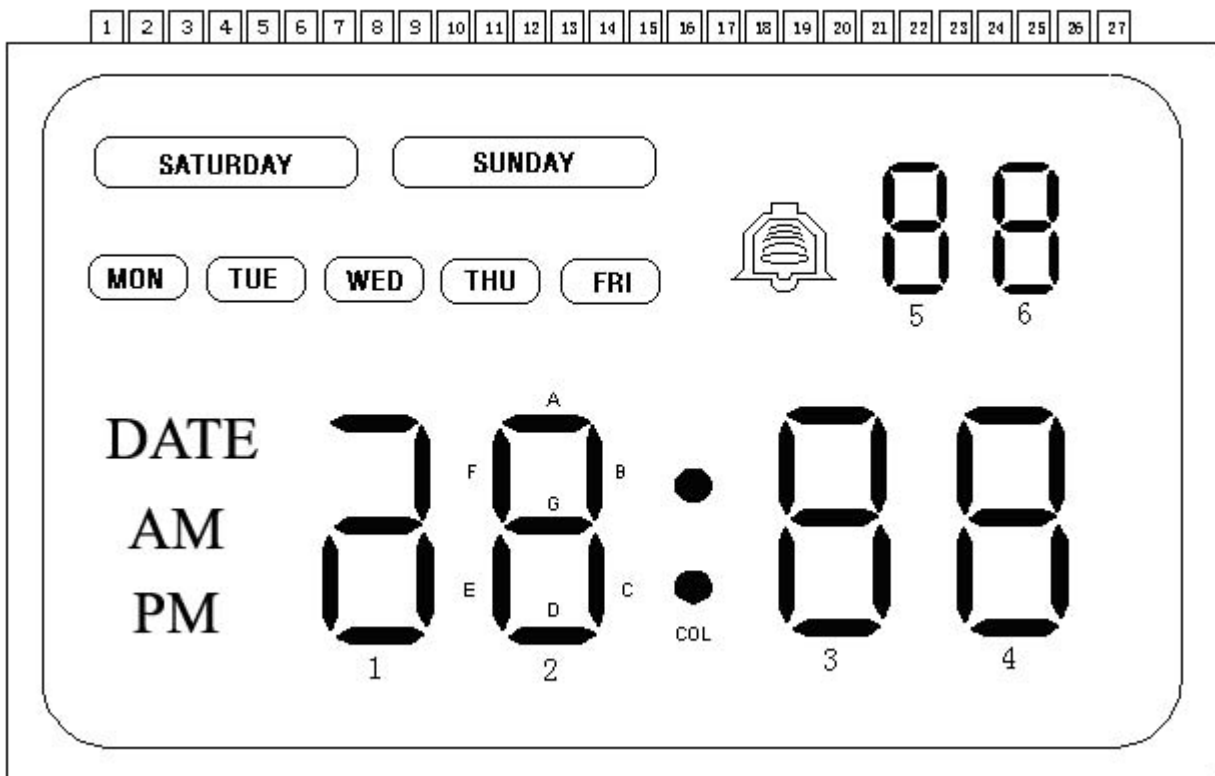
芯片面积: 1590u × 1540u

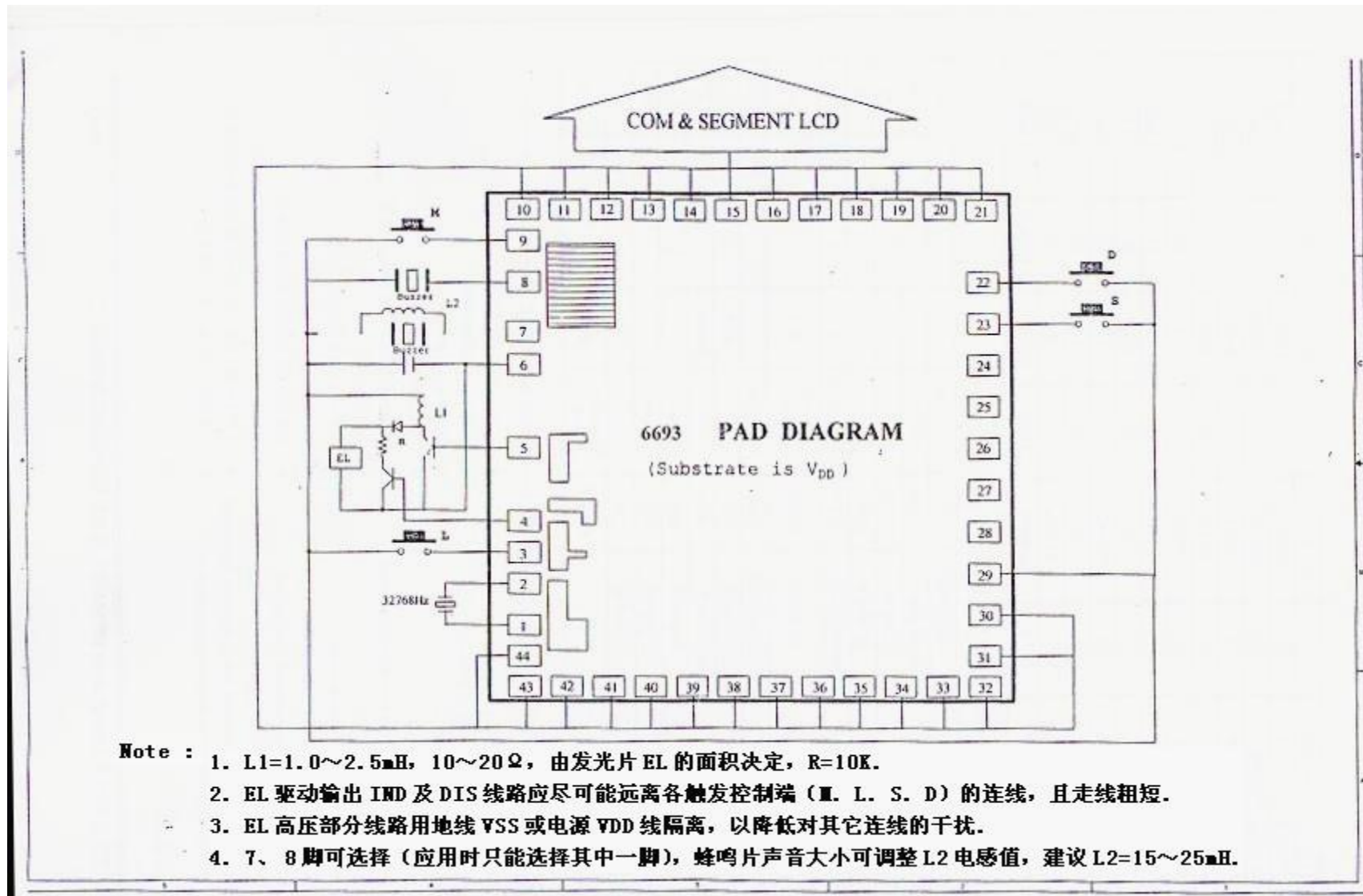
管脚坐标为: 单位 (um)

管脚	名称	X 轴	Y 轴	管脚	名称	X 轴	Y 轴	管脚	名称	X 轴	Y 轴
1	OSCI	1440	1150	16	A3/WE	690	70	31	G6/D6	70	1245
2	OSCO	1440	1030	17	A4/TH	570	70	32	F6/E6	75	1390
3	L	1440	910	18	A5/FR	450	70	33	B5/C5	198	1390
4	DIS	1440	790	19	A6/SA	330	70	34	G5/D5	318	1390
5	IND	1440	670	20	DM/AL	210	70	35	F5/E5	438	1390
6	GND	1440	550	21	COM1	83	70	36	B4/C4	558	1390
7	ALA1	1440	430	22	D	70	215	37	G4/D4	678	1390
8	ALA	1440	310	23	S	70	335	38	F4/E4	798	1390
9	M	1440	190	24	CAP	70	455	39	B3/C3	918	1390
10	COM2	1445	68	25	F1K	70	575	40	G3/D3	1038	1390
11	PM/AM	1290	70	26	VSS2	70	695	41	F3/E3	1158	1390
12	A1/SU	1170	70	27	AC	70	803	42	B2/C2	1278	1390
13	C1/B1	1050	70	28	T1	70	898	43	G2/D2	1400	1390
14	A2/MO	930	70	29	VDD	70	1005	44	F2/E2	1440	1270
15	CL/TU	810	70	30	B6/C6	70	1125				

LCD 连接关系图表:

SEG	PM/AM	A1/SUN	C1/B1	A2/MO	CL/TU	A3/WE	A4/TH
COM1	PM	ADEGI	C1	A2	CL	A3	A4
COM2	AM	SUN	B1	MON	TUE	WED	THU
SEG	A5/FR	A6/SA	DM/AL	B6/C6	G6/D6	F6/E6	B5/C5
COM1	A5	A6	DATE	B6	G6	F6	B5
COM2	FRI	SAT	ALARM	C6	D6	E6	C5
SEG	G5/D5	F5/E5	B4/C4	G4/D4	F4/E4	B3/C3	G3/D3
COM1	G5	F5	B4	G4	F4	B3	G3
COM2	D5	E5	C4	D4	E4	C3	D3
SEG	F3/E3	B2/C2	G2/D2	F2/E2			
COM1	F3	B2	G2	F2			
COM2	E3	C2	D2	E2			





用的是NPN三极管