



型号 Type No:33-1210FN
用途 Application: 音响(Audio)

外形尺寸	Outer Dimensions	
长	Panel Length	90.0 ^{+0.8} _{-0.5} mm
宽	Panel Height	33.5 ^{+0.7} _{-0.5} mm
厚	Panel Thickness	7.0±0.5 mm

引出端子	Lead	
端子间距	Lead Pitch	2.0 mm
端子引出形式	Lead Out	单列折弯 Single Bending Pin

参数 Ratings

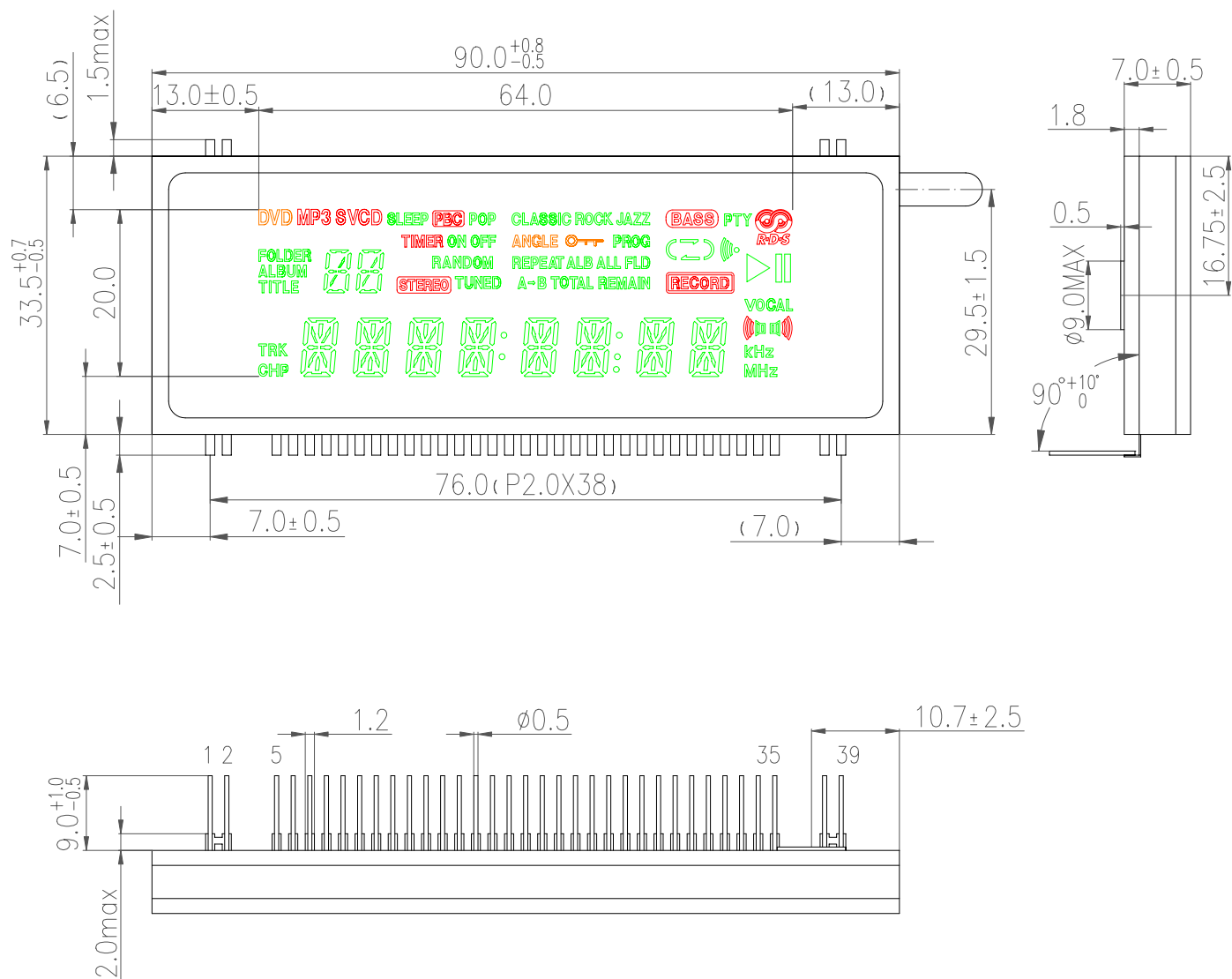
项 目 Item	符 号 Symbol	最小值 Min	推荐值 Recommended	最大值 Max	单位 Unit
灯丝电压 Filament Voltage	Ef	2.79	3.10	3.41	Vac
栅极电压 Grid Voltage	ec	—	32.0	38.0	Vp-p
阳极电压 Anode Voltage	eb	—	32.0	38.0	Vp-p
占空系数 Duty Factor	Du	—	1/13	—	—
脉冲宽度 Pulse Width	tp	—	100	—	μs
工作温度 Operating Temp	Top	-20	—	+70	℃
储存温度 Storage Temp	Tstg	-55	—	+80	℃
发 光 颜 色 Color of Illumination	绿 Green 红 Red 黄橙 (Ysh.0)				

项 目 Item	符 号 Symbol	测试条件 Test Condition	最小值 Min	典型值 Typical	最大值 Max	单位 Unit
灯丝电流 Filament Current	If	Ef=3.1 Vac eb=ec=0	180	200	220	mAac
阳极电流 Anode Current	ib/6~12G	Ef=3.1Vac eb=32.0 Vp-p ec=32.0 Vp-p Du=1/13 tp=100 μ s (笔段全亮)	—	6.5	13.0	mAp-p
	ib/4G,5G		—	10.0	20.0	mAp-p
	ib/1G,3G		—	17.0	34.0	mAp-p
	ib/2G		—	13.0	26.0	mAp-p
	—		—	—	—	mAp-p
栅极电流 Grid Current	ib/6~12G		—	5.0	10.0	mAp-p
	ib/4G,5G		—	9.0	18.0	mAp-p
	ib/1G,3G		—	17.0	34.0	mAp-p
	ib/2G		—	12.0	24.0	mAp-p
	—		—	—	—	mAp-p
亮度 Luminance	L(G)		350 (102)	700 (204)	—	cd/m ² (fL)
	L(R)		35 (10.2)	70 (20.4)	—	cd/m ² (fL)
	L(Ysh.0)		60 (17.5)	120 (35.0)	—	cd/m ² (fL)
	—		—	—	—	cd/m ² (fL)
位间亮度比 Luminance Ratio	Lmin/Lmax		50	—	—	%
栅极截止电压 Grid Cut-off Voltage	Ecco	Ef=3.1Vac Eb=32.0 Vdc	-5.0	—	—	Vdc
阳极截止电压 Anode Cut-off Voltage	Ebco	Ef=3.1Vac ec=32.0 Vp-p Du=1/13 tp=100 μ s	-5.0	—	—	Vdc

注：驱动方式 动态

Drive mode: Dynamic state

附图 1:外形图 Outline Drawing (Unit:mm)



管脚连接 (PIN CONNECTION)

端子序号 (PIN NO.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
连接 (CONNECTION)	F	F	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G
端子序号 (PIN NO.)	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
连接 (CONNECTION)	12G	P16	P15	P14	P13	NC	NC	NC	P12	P11	P10	P9	P8	P7	P6
端子序号 (PIN NO.)	31	32	33	34	35	36	37	38	39						
连接 (CONNECTION)	P5	P4	P3	P2	P1	NP	NP	F	F						

注 :F: 灯丝 (Filament)

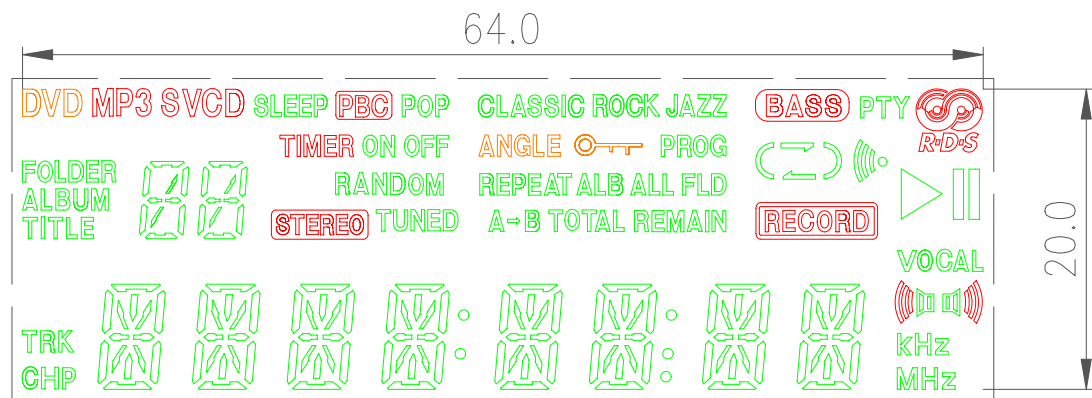
NC: 无连接 (No connection)

P: 阳极 (Anode)

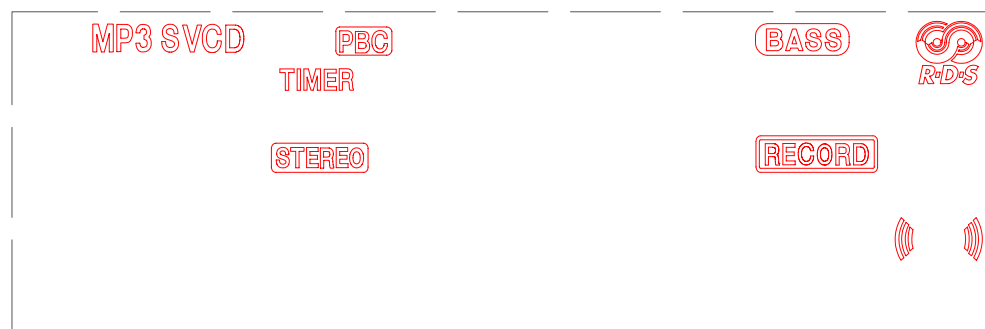
NP: 无引出脚 (No pin)

G: 栅极 (Grid)

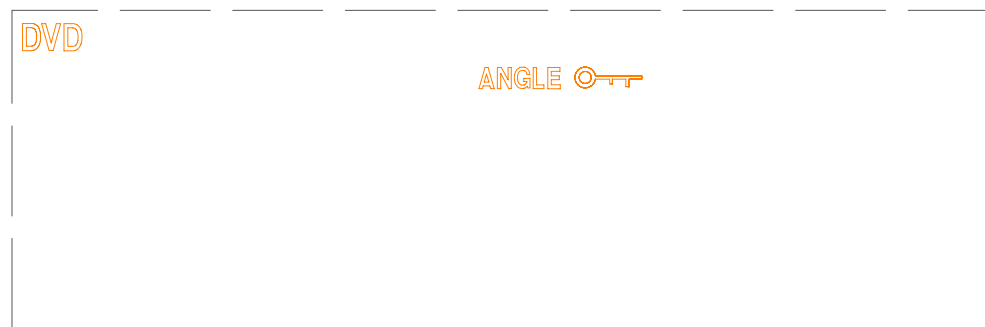
附图2：显示内容 Display Pattern



红色 (Red): (x=0.627 y=0.371)



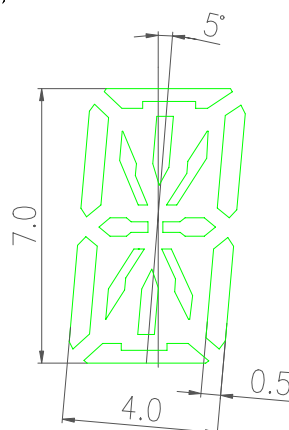
黄橙 (Ysh.0): (x=0.527 y=0.465)



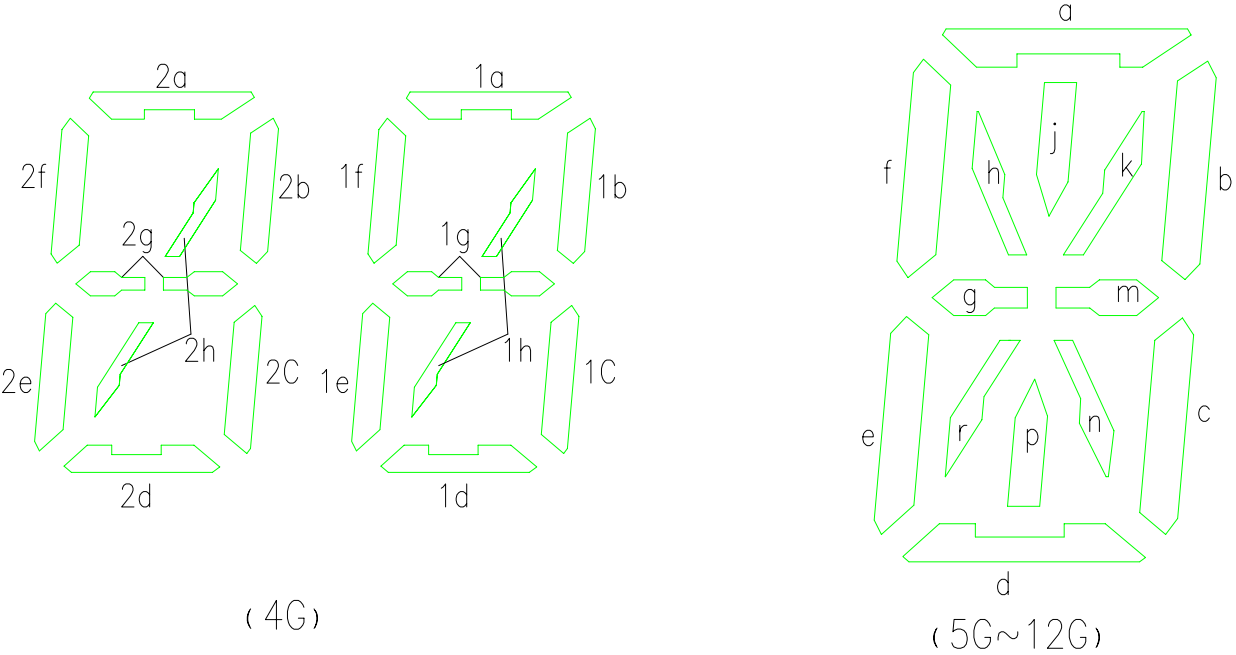
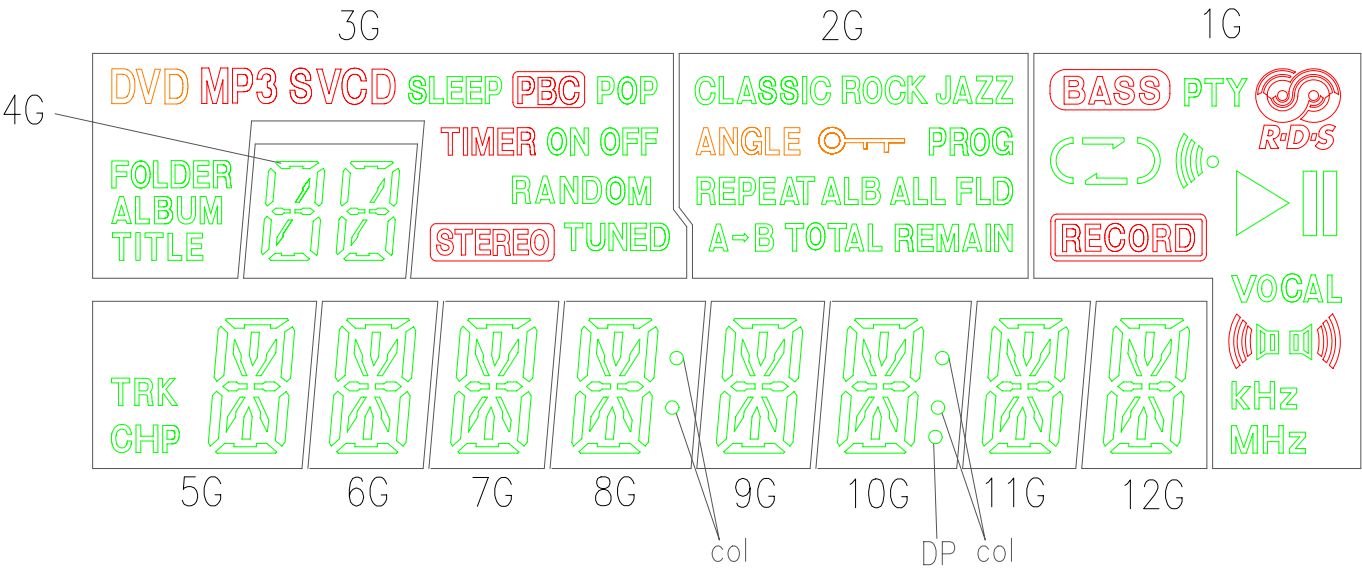
绿色 (Green): (x=0.250 y=0.440) 其余 (Others)

阴体字 (Negative pattern)

STEREO (BASS)



附图 3: 栅网分割 Grid Assignment



附图4:阳极连接 Anode Connection

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G
P1		A→	STEREO	1a	TRK	—	—	—	—	Dp	—	—
P2		B	TUNED	1b	CHP	—	—	col	—	col	—	—
P3	RECORD	TOTAL	RANDOM	1c	a	a	a	a	a	a	a	a
P4	←	REMAIN	TIMER	1d	b	b	b	b	b	b	b	b
P5	)	REPEAT	ON	1e	h	h	h	h	h	h	h	h
P6	→	ALB	OFF	1f	j	j	j	j	j	j	j	j
P7		ALL	POP	1g	k	k	k	k	k	k	k	k
P8		FLD	PBC	1h	f	f	f	f	f	f	f	f
P9		ANGLE	SLEEP	2a	g	g	g	g	g	g	g	g
P10	PTY		S	2b	m	m	m	m	m	m	m	m
P11	BASS	PROG	VCD	2c	e	e	e	e	e	e	e	e
P12	VOCAL	CLASSIC	MP3	2d	r	r	r	r	r	r	r	r
P13		ROCK	DVD	2e	p	p	p	p	p	p	p	p
P14		JAZZ	FOLDER	2f	n	n	n	n	n	n	n	n
P15	KHz	—	ALBUM	2g	c	c	c	c	c	c	c	c
P16	MHz	—	TITLE	2h	d	d	d	d	d	d	d	d