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User's Guide

C-28-0704

VFD

(Vacuum Fluorescent Character Display Module)

For product support, contact

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October 31, 2006

Vacuum Fluorescent Display Specification

PART NUMBER: C-28-0704

FEATURES: 8 Digits, Seven Segmented, with Icons – DVD, SVCD

APPLICATION: Character Display (7-Seg)

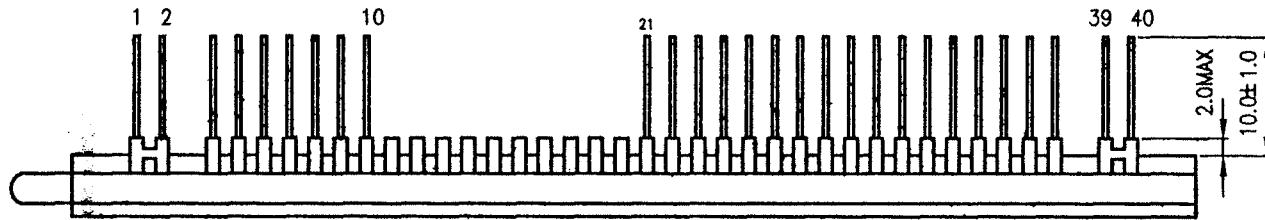
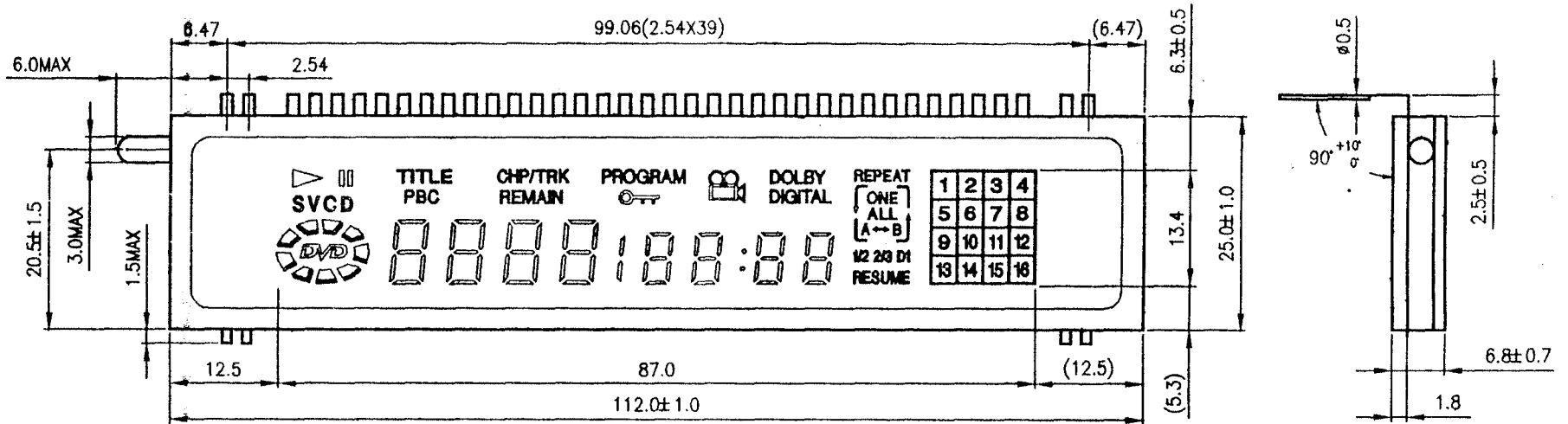
RATINGS: Below

Outer Dimensions	Panel Length	P.L.	112.0	mm	
	Panel Height	P.H.	25.0	mm	
	Panel Thickness	P.T.	6.8	mm	
Leads	Lead Pitch	L.P.	2.54	Mm	
	Lead Out	-	SIL		
Character Size	Character Height	C.H.	Multi	mm	
	Character Width	C.W.	Multi	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	3.9	4.3	4.7	Vac
Peak Grid Voltage	Ec	-	25.0	28.0	Vp-p
Peak Anode Voltage	Eb	-	25.0	28.0	Vp-p
Cut-off Bias	Ek	-	-	-	-
Duty Cycle	Du	-	1/8	-	-
Pulse Width	Tp	-	100	-	uS
Operating Temperature	Topr	-20	-	+ 70	C
Storage Temperature	Tstg	-55	-	+ 85	C
Color of Illumination	Green / Red / Yellow				

Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	lf -	Ef = 4.3 Vac eb = ec = 0	117.0 -	130.0 -	143.0 -	mAac -
Anode Current	ib/1G	Ef = 4.3 Vac eb = 25.0 Vp-p ec = 25.0 Vp-p Du = 1/8 tp = 100 uS	-	11.0	22.0	mAp-p
	ib/2G		-	13.0	26.0	mAp-p
	ib/3,4G		-	6.0	12.0	mAp-p
	ib/5,6,7G		-	9.0	18.0	mAp-p
	-		-	-	-	-
Grid Current	ic/1G		-	11.0	22.0	mAp-p
	ic/2G		-	13.0	26.0	mAp-p
	ic/3,4G		-	8.0	16.0	mAp-p
	ic/5,6,7G		-	11.0	22.0	mAp-p
	-		-	-	-	-
Luminance	L(G)		350 (102)	700 (204)	-	cd/m ² (fL)
	L(R)		35 (10)	70 (20)		cd/m ² (fL)
	L(Y)		60 (17)	120 (34)		cd/m ² (fL)
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 4.3 Vac Eb = 25.0 Vdc	-4.5	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 4.3 Vac ec = 25.0 Vp-p Du = 1/8 tp = 100 uS	-4.5	-	-	Vdc

外形尺寸: (mm)



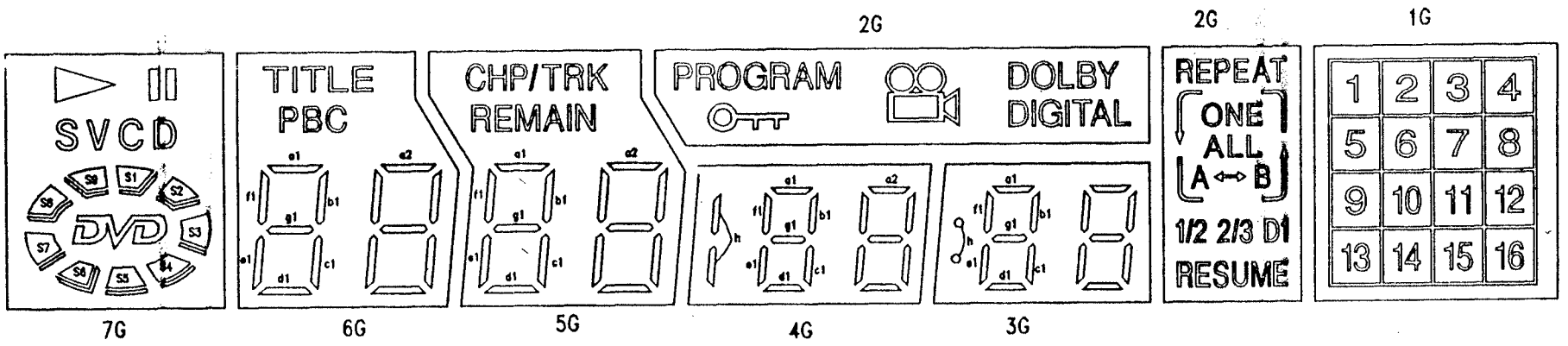
管脚连接

管脚序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
电 极	F	F	Np	7G	6G	5G	4G	3G	2G	1G	Nc	Nc	Nc	Nc	Nc	Nc	Nc	Nc	Nc	Nc
管脚序号	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
电 极	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	Np	F	F

注: F: 灯丝 G: 栅极 P: 阳极 Nc: 无连脚 Np: 无引脚







F= Filament, G= Grid, P= Anode, NC= No Connect, NP= No Pin

栅极分割及显示面



显示颜色：DVD SVCD DOLBY DIGITAL RESUME S1 S4 S7 为红色；⏸ ⏪ ⏩ S3 S6 S9 为黄色；其余为绿色

真值表

	7G	6G	5G	4G	3G	2G	1G
P1	—	—	—	—	—	—	
P2		a1	a1	a1	a1		1
P3		b1	b1	b1	b1	PROGRAM	2
P4	CD	TITLE	CHP/TRK	—	—		3
P5	V	c1	c1	c1	c1	DOLBY DIGITAL	4
P6	S	d1	d1	d1	d1	ALL	5
P7	<i>DVD</i>	e1	e1	e1	e1	REPEAT 	6
P8	S1	f1	f1	f1	f1	ONE	7
P9	S2	g1	g1	g1	g1	—	8
P10	S3	PBC	REMAIN	h	h	—	9
P11	S4	a2	a2	a2	a2	B	10
P12	S5	b2	b2	b2	b2	A ↔	11
P13	S6	c2	c2	c2	c2	—	12
P14	S7	d2	d2	d2	d2	1/2	13
P15	S8	e2	e2	e2	e2	2/3	14
P16	S9	f2	f2	f2	f2	D1	15
P17	—	g2	g2	g2	g2	RESUME	16