

## User's Guide

# C-28-0704

# VFD

(Vacuum Fluorescent Character Display Module)

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For product support, contact

New haven Display International  
2511 Technology Drive #101  
Elgin , IL 601 24  
Tel: (847) 8 44-8795 Fax: (847) 8 44-8796

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# Vacuum Fluorescent Display Specification

**PART NUMBER:** C-28-0704

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

**APPLICATION:** Character Display (7-Seg)

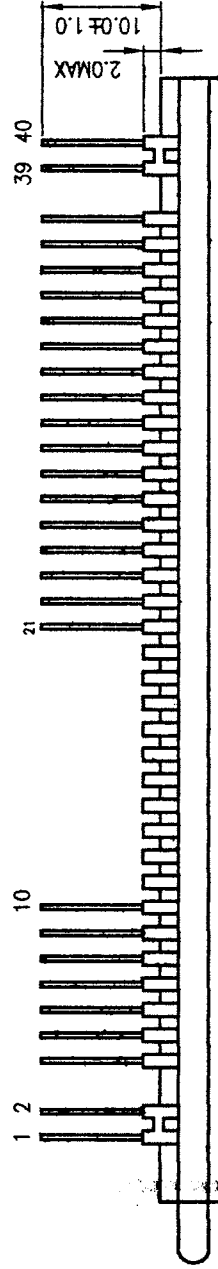
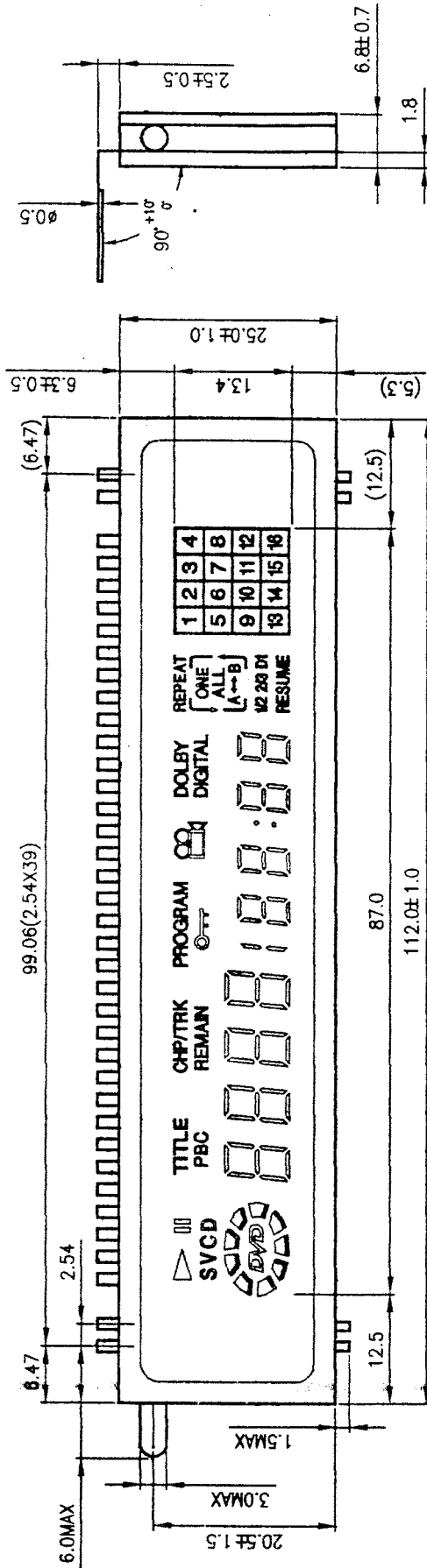
**RATINGS:** Below

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

## Electrical Characteristics

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

外形尺寸: (mm)



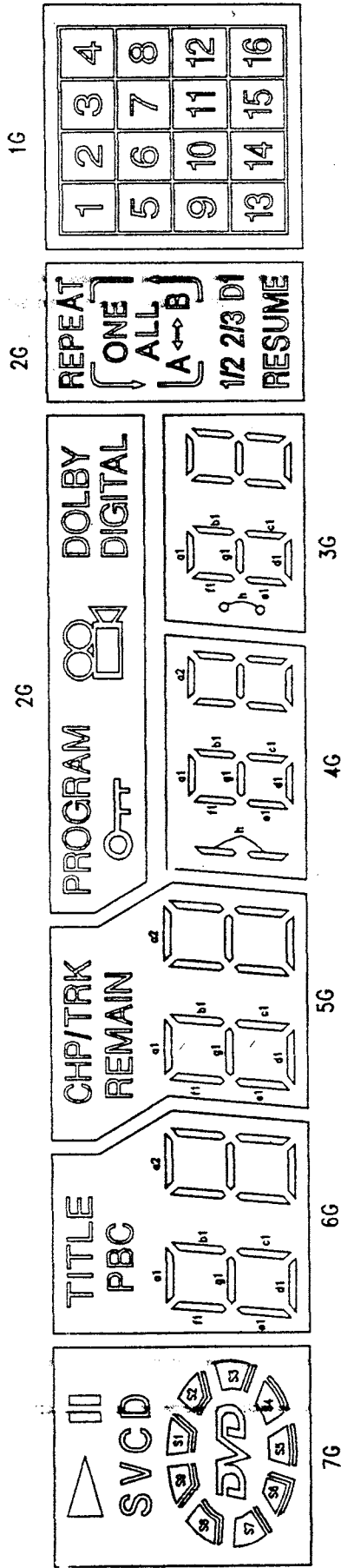
管脚连接

管脚序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
电板	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
电板	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: 无引脚 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: SVC D 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