

User's Guide

C-40-0701A

VFD

(Vacuum Fluorescent Character Display Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: C-40-0701A

FEATURES: 5 Digits, Custom Seven Segmented, with Icons – Microwave oven

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

RATINGS: Below

Outer Dimensions	Panel Length	P.L.	86.0	mm	
	Panel Height	P.H.	40.0	mm	
	Panel Thickness	P.T.	8.5	mm	
Leads	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	SIL		
Character Size	Character Height	C.H.	-	mm	
	Character Width	C.W.	-	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	2.8	3.10	3.4	Vac
Peak Grid Voltage	Ec	-	28.0	31.0	Vp-p
Peak Anode Voltage	Eb	-	28.0	31.0	Vp-p
Cut-off Bias	Ek	-	-	-	-
Duty Cycle	Du	-	1/7.79	-	-
Pulse Width	Tp	-	920	-	uS
Operating Temperature	Topr	-40	-	+ 80	C
Storage Temperature	Tstg	-55	-	+ 85	C
Color of Illumination	Green / Red				

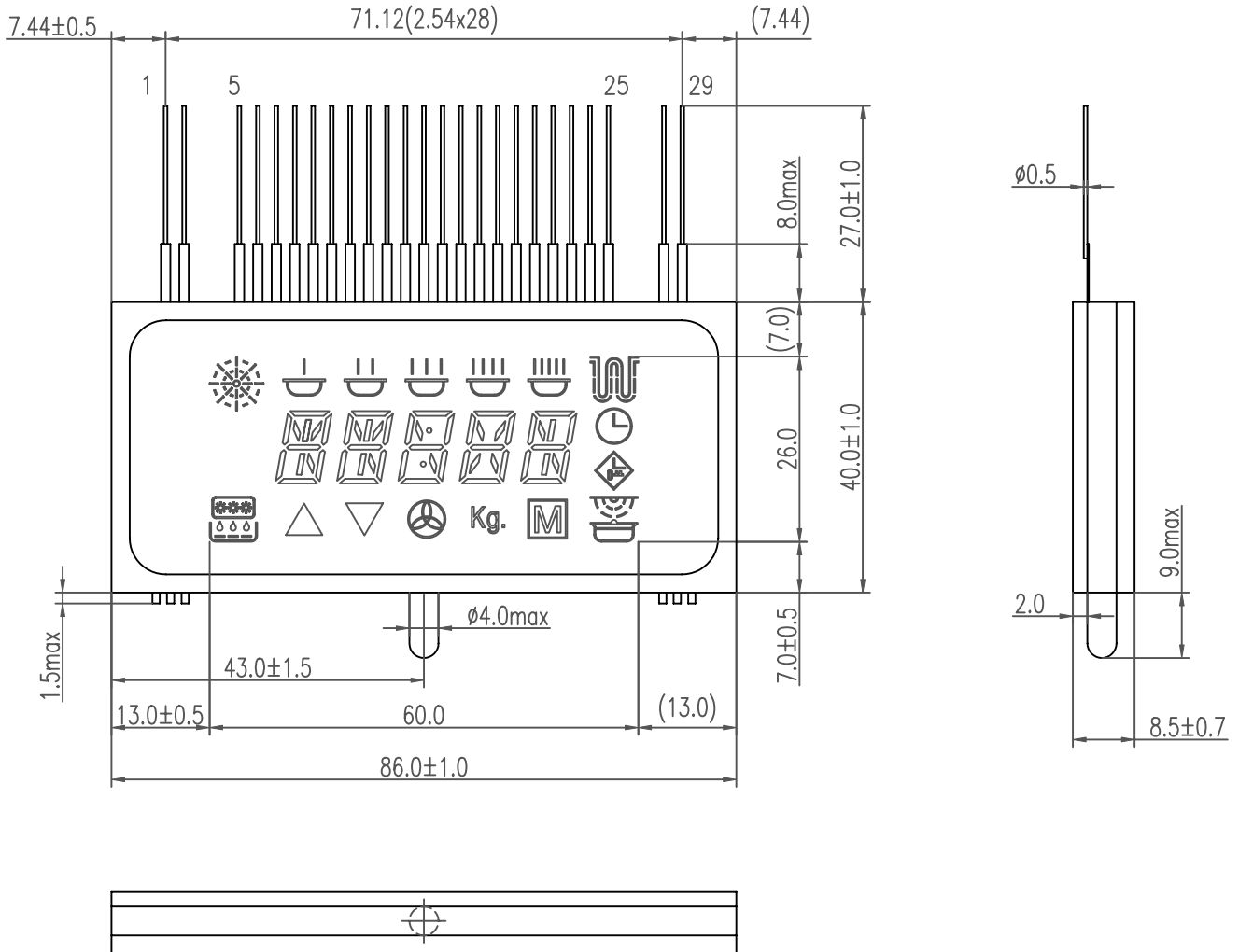
Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	If -	Ef = 3.1 Vac eb = ec = 0	185.0 -	208.0 -	230.0 -	mAac -
Anode Current	ib/1G,4G ib/2G ib/3G - -	Ef = 3.1 Vac eb = 28.0 Vp-p ec = 28.0 Vp-p Du = 1/7.79 tp = 920 uS	-	10.0	20.0	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
Grid Current	ic/1G, 4G ic/2G ic/3G - -		-	10.0	20.0	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
			-	-	-	mAp-p
Luminance	L(G) L(R) -		350 (102)	700 (204)	-	cd/m ² (fL)
			35 (10.2)	70 (20.4)	-	cd/m ² (fL)
			-	-	-	cd/m ² (fL)
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 3.1 Vac Eb = 28.0 Vdc	-4.5	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 3.1 Vac ec = 28.0 Vp-p Du = 1/7.79 tp = 920 uS	-3.0	-	-	Vdc

Drive Mode: Dynamic state

编号 Mark:

附图 1: 外形图 Outline Drawing (Unit:mm)



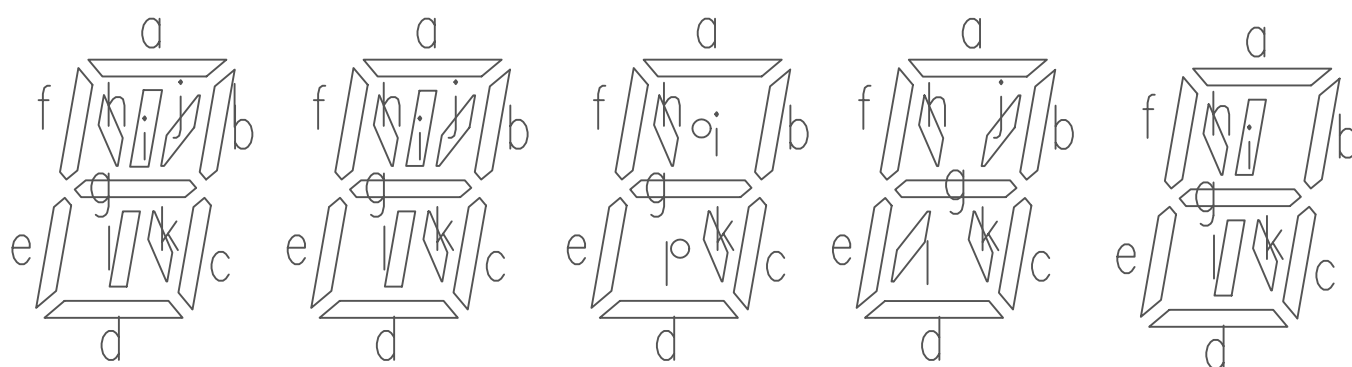
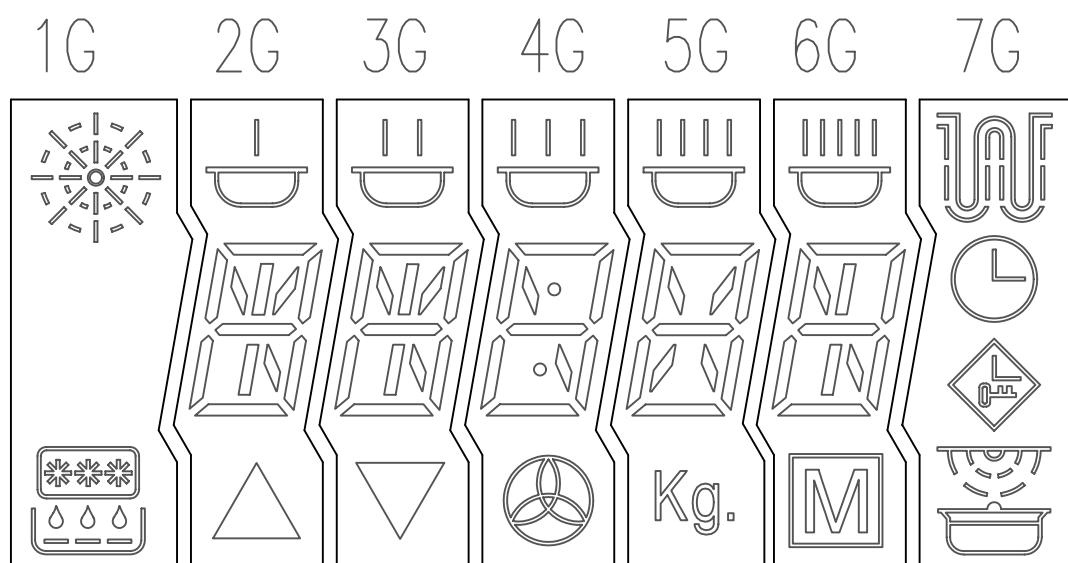
管脚连接 : (Pin Connection)

端子序号 (Pin No)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
连接(Connection)	F	F	Np	NP	1G	P14	P13	P12	2G	P11	P10	3G	P9	P8	4G	P7	P6	P5	5G	P4
端子序号 (Pin No)	21	22	23	24	25	26	27	28	29											
连接(Connection)	P3	6G	P2	P1	7G	NP	NP	F	F											

注: F: 灯丝 (Filament) P: 阳极 (Anode) G: 栅极 (Grid) NP: 无引脚 (No Pin)

附图2：显示内容及栅极分割

Display Pattern And Grid Assignment



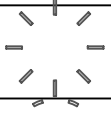
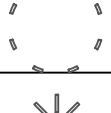
显示颜色: (color of illumination)

红色 (Red): (x=0.627,y=0.371)



绿色 (Green): (x=0.250,y=0.440) others

附图3: 阳极连接 Anode Connection

	1G	2G	3G	4G	5G	6G	7G
P1	—	a	a	a	a	a	
P2	—	b	b	b	b	b	
P3	—	c	c	c	c	c	—
P4	—	d	d	d	d	d	
P5	—	e	e	e	e	e	
P6	—	f	f	f	f	f	
P7	•						—
P8		g	g	g	g	g	—
P9		h	h	h	h	h	—
P10		i	i	i	—	i	—
P11		j	j	—	j	—	—
P12	—	k	k	k	k	k	
P13		l	l	l	l	l	—
P14					Kg.		—

注:具体应用时可将1G和7G合并为同一栅极