

## User's Guide

# D0120MY-29-2001

# **VFD- RoHS Compliant**

(Vacuum Fluorescent Display Module)

---

For product support, contact

Newhaven Display International  
2511 Technology Drive, #101  
Elgin, IL 60124  
Tel: (847) 844-8795 Fax: (847) 844-8796

February 26, 2008

# Vacuum Fluorescent Display Specification

PART NUMBER: D0120 MY- 29-2001

FEATURES: 20 Digits, Alphanumeric

APPLICATION: Character Display ( Alphanumeric )

RATINGS: Below

Outer Dimensions	Panel Length	P.L.	205.0	mm	
	Panel Height	P.H.	29.0	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.	11.0	mm	
	Character Width	C.W.	5.5	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	7.65	8.5	9.35	Vac
Peak Grid Voltage	ec	65.0	70.0	75.0	Vp-p
Peak Anode Voltage	eb	65.0	70.0	75.0	Vp-p
Cut-off Bias	Ek	-	-	-	-
Duty Cycle	Du	-	1/ 21	-	-
Pulse Width	tp	-	400	-	uS
Operating Temperature	Topr	-40	-	+ 85	C
Storage Temperature	Tstg	-50	-	+ 95	C
Color of Illumination	Green				

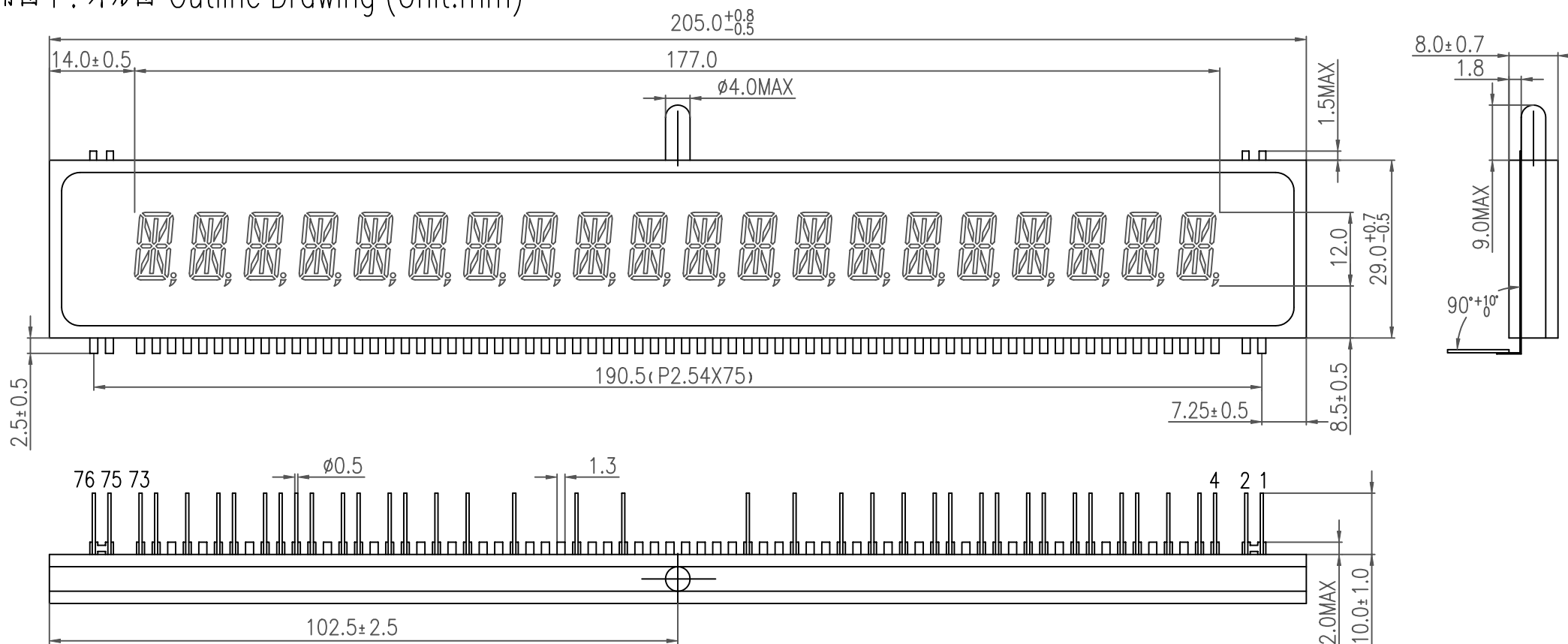
*NOTE: Re-enforced Grid and Filament structure will support +10,000 Hours of operation until 1/2 brightness.*

**Electrical  
Characteristics**

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
<b>Filament Current</b>	If -	Ef = 8.5 Vac eb = ec = 0	121.5 -	135.0 -	148.5 -	mAac -
<b>Anode Current</b>	ib/1~20G - - - -	Ef = 8.5 Vac eb = 70.0 Vp-p ec = 70.0 Vp-p Du = 1/21 tp = 400 uS	- - - - -	20.0 - - - -	40.0 - - - -	mAp-p mAp-p mAp-p mAp-p mAp-p
<b>Grid Current</b>	ic/1~20G - - - -	All Segs are lit	- - - - -	25.0 - - - -	50.0 - - - -	mAp-p mAp-p mAp-p mAp-p mAp-p
<b>Luminance</b>	L(G) -		350 (102)	700 (204)	-	cd/m <sup>2</sup> fL
<b>Luminance Ratio</b>	Lmin/Lmax		50	-	-	%
<b>Grid Cut-off Voltage</b>	Ecco	Ef = 8.5 Vac Eb = 70.0 Vdc	-9.0	-	-	Vdc
<b>Anode Cut-off Voltage</b>	Ebco	Ef = 8.5 Vac ec = 70.0 Vp-p Du = 1/21 tp = 400 uS	-9.0	-	-	Vdc

\* Drive Mode is Dynamic State

附图1：外形图 Outline Drawing (Unit:mm)



PIN CONNECTION (管脚连接)

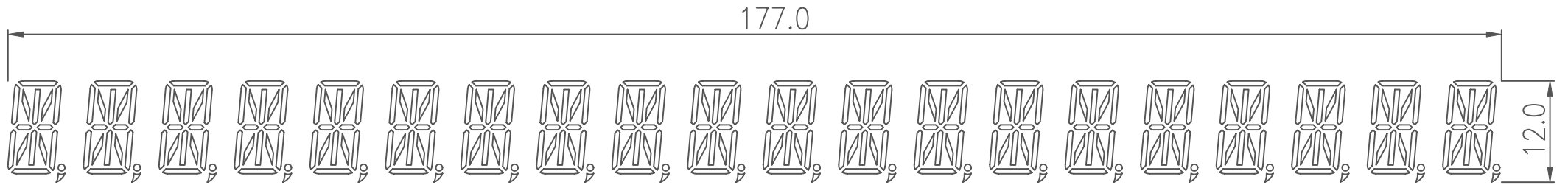
TERMINAL No. (端子序号)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
ELECTRODE (连接)	F	F	NP	a	1G	NX	b	NX	2G	j	NX	3G	k	NX	4G	n	NX	p	5G	NX	r	6G	NX	Com	NX	7G
TERMINAL No. (端子序号)	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
ELECTRODE (连接)	NX	8G	NX	NX	9G	NX	NX	10G	NX	NX	NX	NX	NX	NX	11G	NX	NX	12G	NX	NX	NX	13G	NX	NX	14G	
TERMINAL No. (端子序号)	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76		
ELECTRODE (连接)	NX	DP	NX	15G	d	NX	16G	c	NX	e	17G	m	18G	NX	g	19G	NX	f	NX	20G	h	NP	F	F		

Notes(注): F: Filament (灯丝) G: Grid (栅极) P: Anode (阳极)

NX: No Extended (无外接脚) NP: No Pin (无引出脚)

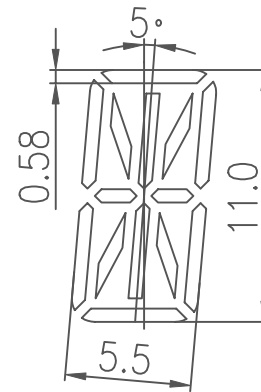
control No.	QG/ZB0E 025.07.3-05
Spec. No.	SPC05.04.01-02
MODEL	<b>D0120MY-29-2001</b>

附图2：显示内容 Display Pattern



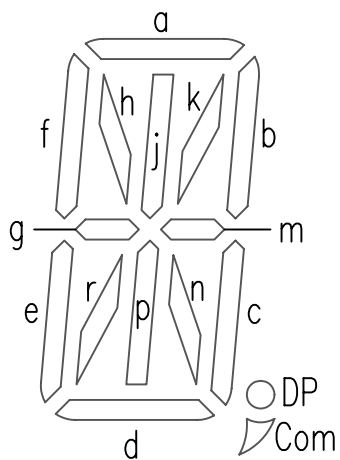
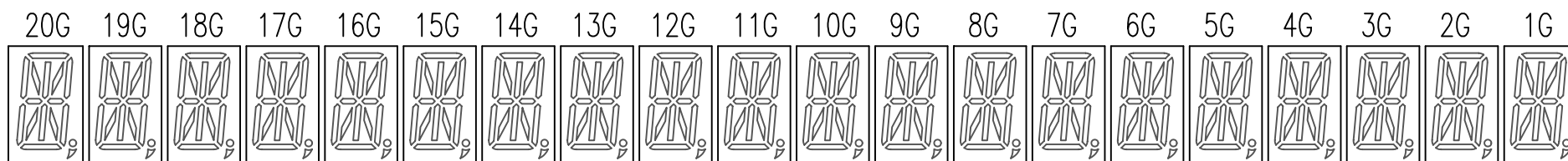
显示颜色 (Color of illumination):

绿色 Green: X=0.250 Y=0.440 全部 ALL



control No.	QG/ZBOE 025.07.3-05
Spec. No.	SPC05.04.01-02
MODEL	<a href="#">D0120MY-29-2001</a>

附图3: 栅网分割 Grid Assignment



(1G~20G)

control No.	QG/ZBOE 025.07.3-05
Spec. No.	SPC05.04.01-02
MODEL	<i>D0120MY-29-2001</i>