

User's Guide

D0109MT-25-1101

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 21, 2008

Vacuum Fluorescent Display Specification

PART NUMBER: D0109MT-25-1101

FEATURES: 9 Digits – Seven Segmented, with custom segments, Decimals + Apostrophe

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

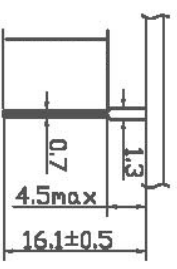
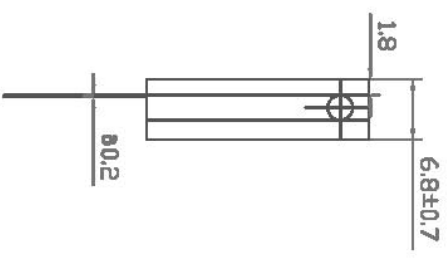
RATINGS: Below

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.	9.7	mm
	Character Width	C.W.	-	mm
Item	Symbol	Min.	Recommended	Max. Unit
Filament Voltage	Ef	3.9	4.3	4.7 Vac
Peak Grid Voltage	ec	-	25.0	30.0 Vp-p
Peak Anode Voltage	eb	-	25.0	30.0 Vp-p
Cut-off Bias	Ek	-	0	- Vdc
Duty Cycle	Du	-	1/15	-
Pulse Width	tp	-	100	- uS
Operating Temperature	Topr	-40	-	+ 85 C
Storage Temperature	Tstg	-50	-	+ 95 C
Color of Illumination	Green			

Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	If -	Ef = 4.3 Vac eb = ec = 0	70.0 -	78.0 -	86.0 -	mAac -
Anode Current	ib / 1~11G - - - -	Ef = 4.3 Vac eb = 25.0 Vp-p ec = 25.0 Vp-p Du = 1/15 tp = 100uS	- - - - -	4.0 - - - -	8.0 - - - -	mA _{p-p} - - - -
Grid Current	ic / 1~11G - - - -	(All segs are ON)	- - - - -	5.0 - - - -	10.0 - - - -	mA _{p-p} - - - -
Luminance	L(G) -		350 (102)	700 (204)	-	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 = 1/15 Tp = 100uS	-4.5	-	-	Vdc

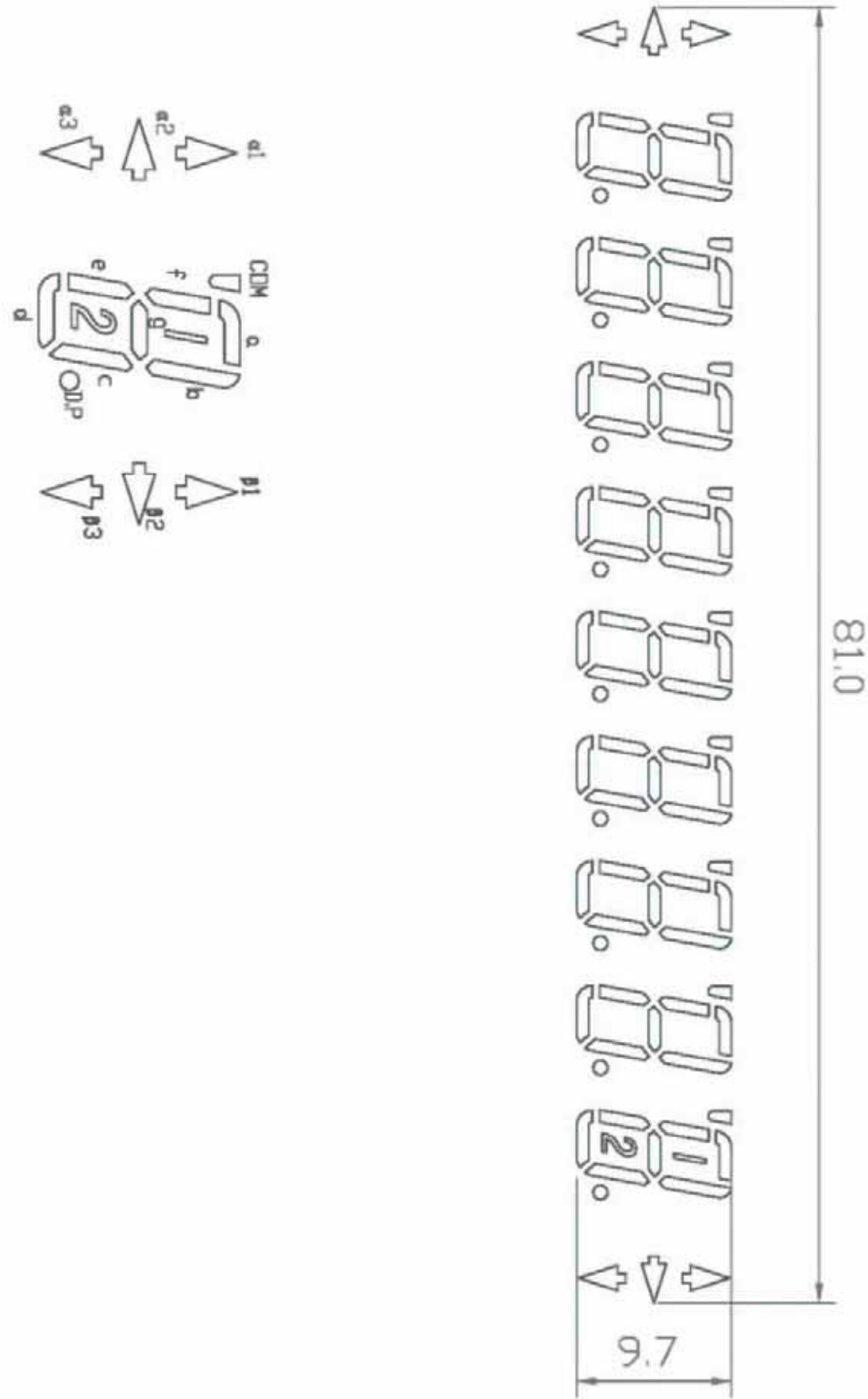
DRIVE MODE: Dynamic State

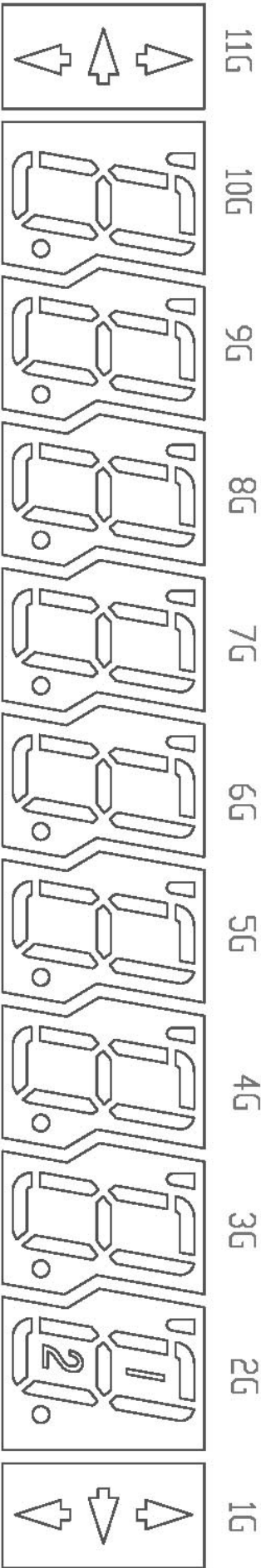


NOTE: F: Filament G: Grid P: Anode NP: No Pin NC: No Connection

۱۳۳

2: Grid Assignment:





4: Anode Connection:

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G
P1											$\alpha 1$
P2											$\alpha 2$
P3											$\alpha 3$
P4		g	g	g	g	g	g	g	g	g	
P5		f	f	f	f	f	f	f	f	f	
P6		e	e	e	e	e	e	e	e	e	
P7		d	d	d	d	d	d	d	d	d	
P8		D.P	D.P	D.P	D.P	D.P	D.P	D.P	D.P	D.P	
P9		c	c	c	c	c	c	c	c	c	
P10		b	b	b	b	b	b	b	b	b	
P11		a	a	a	a	a	a	a	a	a	
P12		COM	COM	COM	COM	COM	COM	COM	COM	COM	
P13		1 2									
P14	$\beta 3$										
P15	$\beta 2$										
P16	$\beta 1$										