

## User's Guide

# D0116LY-29-1603

# **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:** D0116LY-29-1603

**FEATURES:** 16 Digits, Alphanumeric + Comma + Decimal + Apostrophe

**APPLICATION:** Character Display (*Alphanumeric*)

**RATINGS:** Below

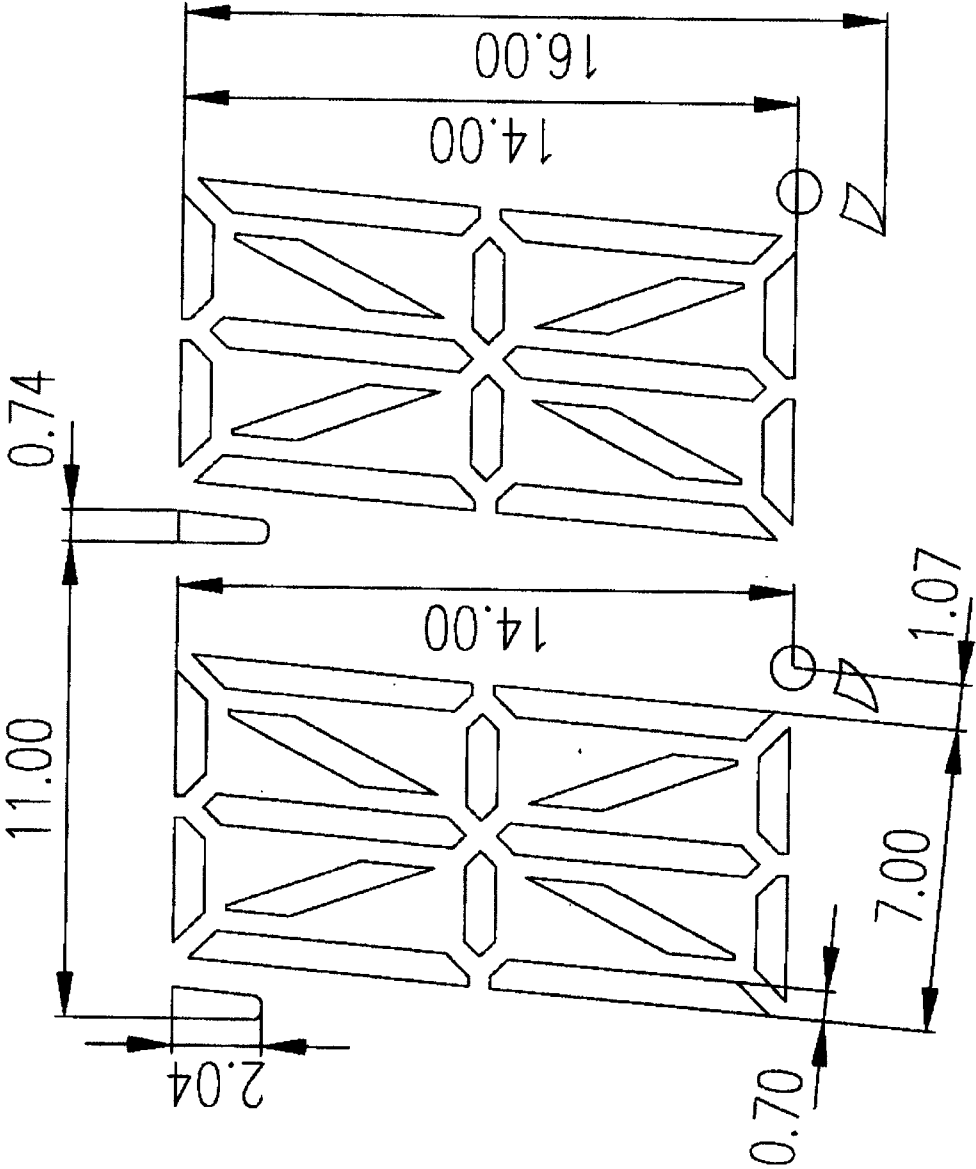
<b>Outer Dimensions</b>	Panel Length	P.L.	205.2	mm	
	Panel Height	P.H.	29.0	mm	
	Panel Thickness	P.T.	8.0	mm	
<b>Leads</b>	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	SIL		
<b>Character Size</b>	Character Height	C.H.	14.0	mm	
	Character Width	C.W.	7.0	mm	
<b>Item</b>	<b>Symbol</b>	<b>Min.</b>	<b>Recommended</b>	<b>Max.</b>	<b>Unit</b>
<b>Filament Voltage</b>	Ef	7.65	8.5	9.35	Vac
<b>Peak Grid Voltage</b>	ec	-	32.0	38.0	Vp-p
<b>Peak Anode Voltage</b>	eb	-	32.0	38.0	Vp-p
-	-	-	-	-	Vdc
<b>Duty Cycle</b>	Du	-	1/ 17	-	-
<b>Pulse Width</b>	tp	-	100	-	uS
<b>Operating Temperature</b>	Topr	-20	-	+ 70	C
<b>Storage Temperature</b>	Tstg	-55	-	+ 80	C
<b>Color of Illumination</b>	Green				

**Electrical  
Characteristics**

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	if	Ef = 8.5 Vac	144.0	160.0	176.0	MAac
	-	eb = ec = 0	-	-	-	-
Anode Current	ib/1~16G	Ef = 8.5 Vac eb = 32.0 Vp-p ec = 32.0 Vp-p Du = 1/17 tp = 100 uS	-	13.0	26.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Grid Current	ic/1~16G		-	15.0	30.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Luminance	L(G)		350	700	-	cd/m <sup>2</sup>
	-		(102)	(204)	-	fL
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 8.5 Vac Eb = 32.0 Vdc	-6.0	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 8.5 Vac ec = 32.0 Vp-p Du = 1/17 tp = 100 uS	-6.0	-	-	Vdc

\* Drive Mode is Dynamic State





	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G
P1	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp
P2	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot	Dot
P3	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
P4	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
P5	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
P6	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
P7	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
P8	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
P9	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
P10	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
P11	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
P12	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
P13	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
P14	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k
P15	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h
P16	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j
P17	u	u	u	u	u	u	u	u	u	u	u	u	u	u	u	u
P18	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
P19	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com	Com