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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

NEWHAVEN DISPLAY INTERNATIONAL

User's Guide

D0119LT-29-1901

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 25, 2008

NEWHAVEN DISPLAY INTERNATIONAL

October 31, 2006

Vacuum Fluorescent Display Specification

PART NUMBER: D0119LT-29-1901

FEATURES: 19 Digits, 7-Segmented, Instrumentation, Decimal Point, Comma

APPLICATION: Character Display (7-Segmented)

RATINGS: Below

Outer Dimensions	Panel Length	P.L.	205.0	mm
	Panel Height	P.H.	29.0	mm
	Panel Thickness	P.T.	8.0	mm
Leads	Lead Pitch	L.P.	2.54	mm
	Lead Out	-	SIL	
Character Size	Character Height	C.H.	11.0 / 13.0	mm
	Character Width	C.W.	4.9 / 5.5	mm

Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	7.65	8.5	9.35	Vac
Peak Grid Voltage	ec	-	42.0	46.0	Vp-p
Peak Anode Voltage	eb	-	42.0	46.0	Vp-p
-	tp	-	-	-	-
Duty Cycle	Du	-	1/21	-	-
Pulse Width	tp	-	100	-	uS
Operating Temperature	Topr	-40	-	+85	C
Storage Temperature	Tstg	-50	-	+ 95	C
Color of Illumination	Green				

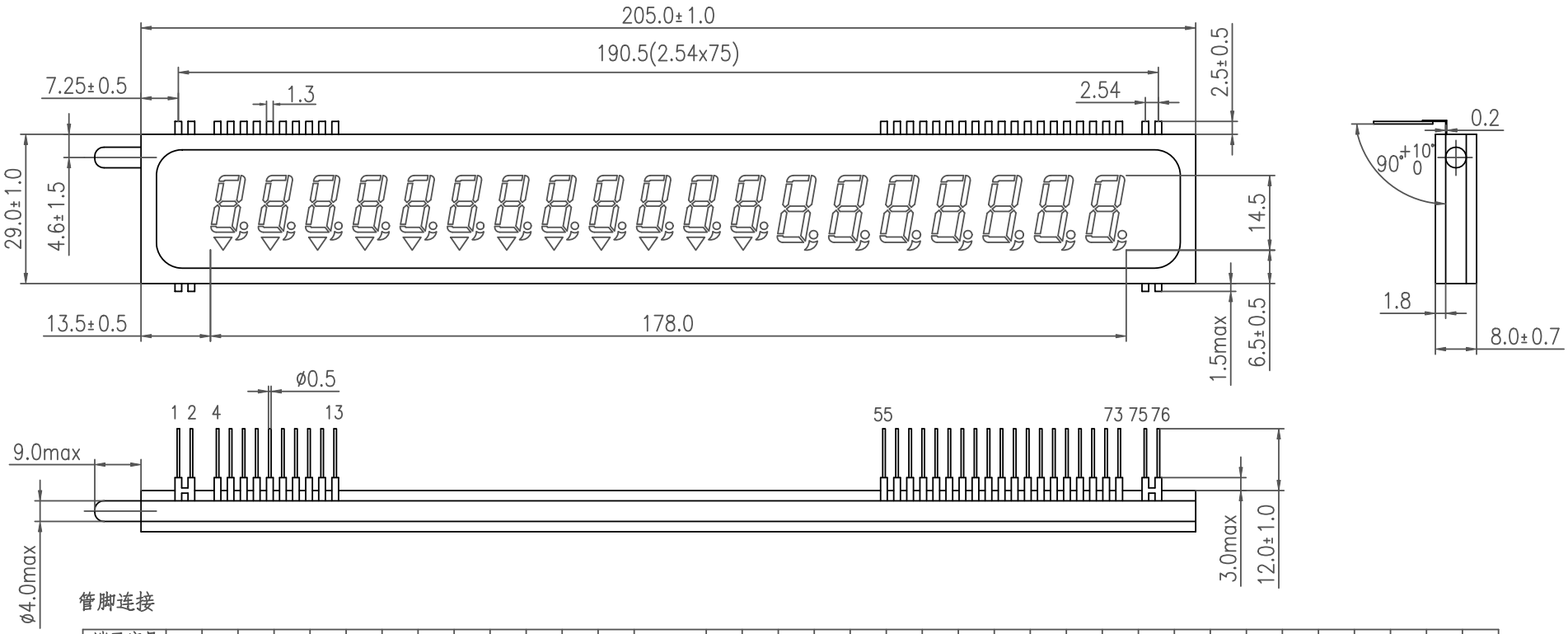
D0119LT-29-1901

Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	If -	Ef = 8.5 V_{ac} eb = ec = 0	123.8 -	137.5 -	151.3 -	mA_{ac} -
Anode Current	ib/1G~12G ib/13G~19G - - -	Ef = 8.5 V_{ac} eb = 42.0 V_{p-p} ec = 42.0 V_{p-p} Du = 1/21 tp = 100 uS	- - - - -	9.0 10.0 - - -	18.0 20.0 - - -	mAp-p mAp-p mAp-p mAp-p mAp-p
Grid Current	ic / 1G~12G ic / 13G~19G - - -		- - - - -	11.5 12.0 - - -	23.0 24.0 - - -	MA_{p-p} MA_{p-p} MA_{p-p} MA_{p-p} 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 = 8.5 Vac eb = 42.0 Vdc	-8.0	-	-	V_{dc}
Anode Cut-off Voltage	Ebco	Ef = 8.5 Vac ec = 42.0 Vp-p Du = 1/21 tp = 100uS	-8.0	-	-	V_{dc}

Drive Mode = Dynamic State

外形图

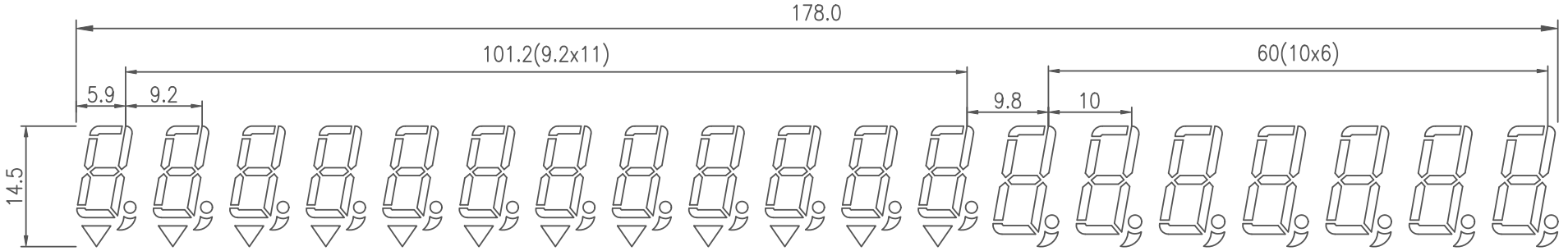


管脚连接

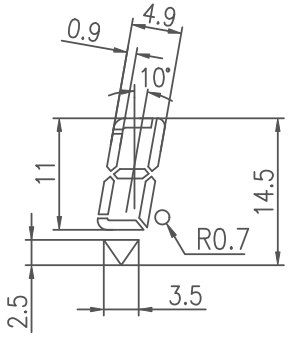
端子序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14~54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
连接	F	F	NP	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G	17G	18G	19G	NP	F	F

注：F：灯丝　G：栅极　P：阳极　NP：无引出脚

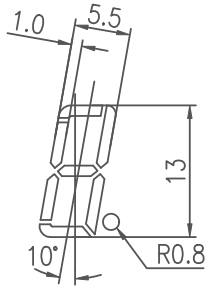
显示面



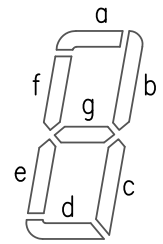
显示颜色：绿色（全部）



(1~12G)

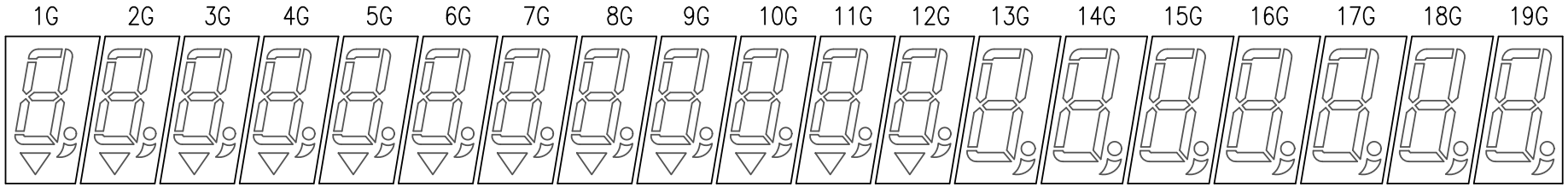


(13~19G)



(1~19G)

栅极分割



阳极连接

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G	17G	18G	19G
P1	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
P2	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
P3	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
P4	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
P5	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
P6	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
P7	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
P8	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
P9	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱	▱
P10	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽							