NEWHAVEN DISPLAY INTERNATIONAL

User's Guide

D0106LT-43-0601

VFD- RoHS Compliant

(Vacuum Fluorescent Display)

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February 21, 2008

NEWHAVEN DISPLAY INTERNATIONAL

October 31, 2006

Vacuum Fluorescent Display Specification

PART NUMBER: **D0106LT-43-0601**

FEATURES: 6 Digits – Seven Segmented, with Decimal points, commas, underscores

APPLICATION: Character Display- (7-Seg)

RATINGS: Below

Outer Dimensions	Panel Length	P.L.	130.0	mm
	Panel Height	P.H.	43.0	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.	20.0	mm
	Character Width	C.W.	9.5	mm

Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	4.0	4.4	4.8	Vac
Peak Grid Voltage	ec	-	34.0	40.0	Vp-p
Peak Anode Voltage	eb	-	34.0	40.0	Vp-p
Cut-off Bias	Ek	-	0	-	Vdc
Duty Cycle	Du	-	1/8	-	-
Pulse Width	tp	-	100	-	uS
Operating Temperature	Topr	-20	-	+ 70	C
Storage Temperature	Tstg	-55	-	+ 80	C
Color of Illumination	Green				

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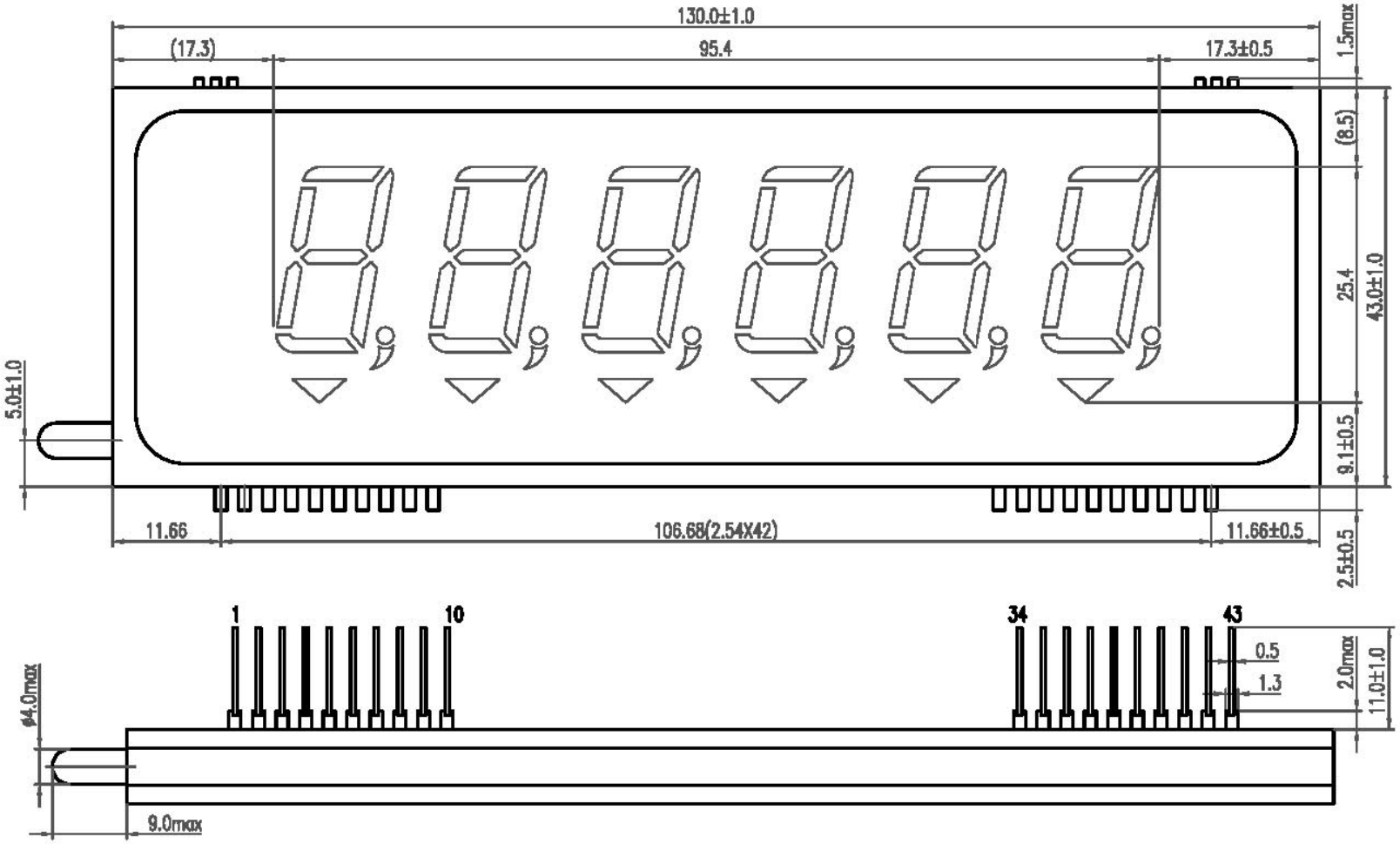
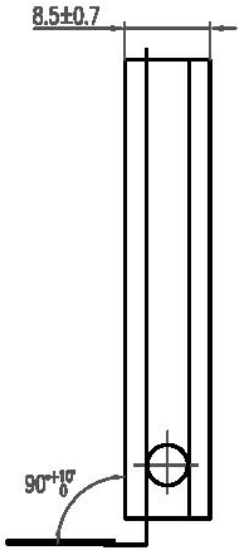
Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	If	Ef = 4.4 V_{ac}	180.0	200.0	220.0	mAac
	-	eb = ec = 0	-	-	-	-
Anode Current	ib / 1~6G	Ef = 4.4 V_{ac}	-	15.0	30.0	mAp-p
	-	eb = 34.0 V_{p-p}	-	-	-	-
	-	ec = 34.0 V_{p-p}	-	-	-	-
	-	Du = 1/8	-	-	-	-
	-	tp = 100uS	-	-	-	-
Grid Current	ic / 1~6G	(All segs are ON)	-	18.0	36.0	mA_{p-p}
	-		-	-	-	-
	-		-	-	-	-
	-		-	-	-	-
	-		-	-	-	-
Luminance	L(G)		686	1372	-	cd/m^2
			(200)	(400)		fL
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 4.4 Vac Eb = 34.0 Vdc	-6.0	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 4.4 Vdc ec = 34.0 Vp-p Du = 1/8 Tp = 100uS	-4.0	-	-	V_{dc}

DRIVE MODE: Dynamic State

1: Outline Drawing (Unit:mm)



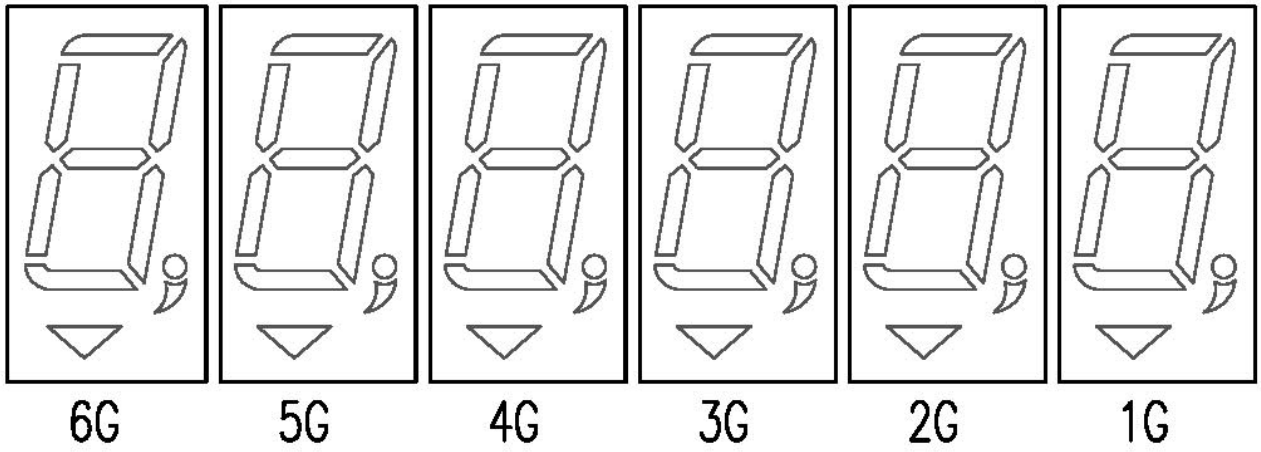


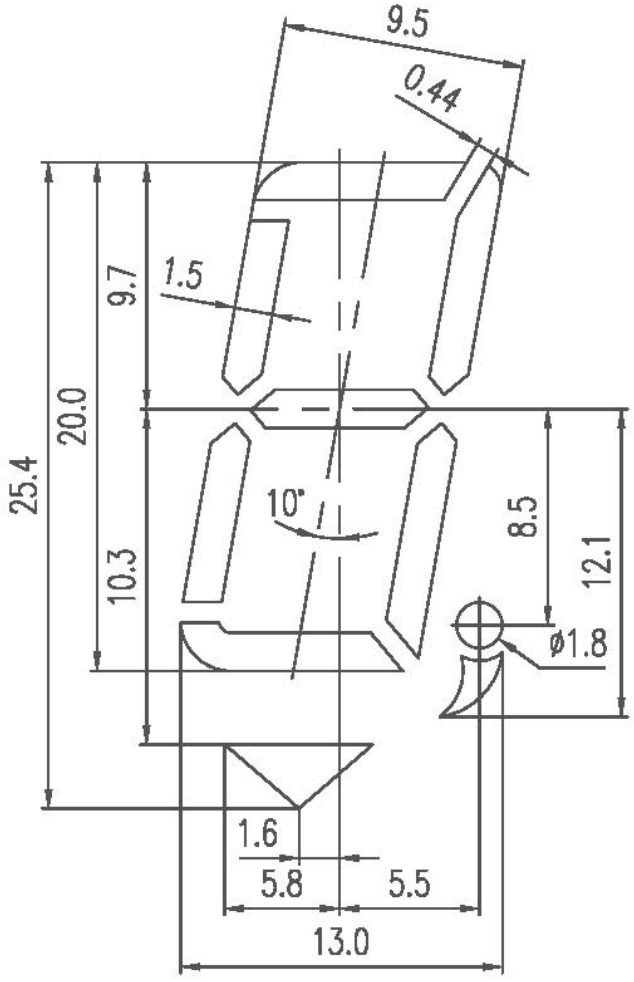
Pin Connections:

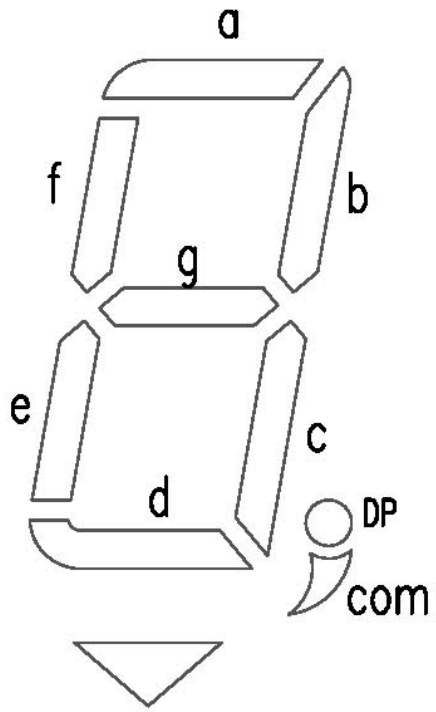
Pin Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Connection	F	F	P6	P7	P5	P4	P10	G6	G5	G4	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Pin Number	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Connection	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	G3	G2	G1	P9	P8	P3	P2	P1	F	F	

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

2: Grid Assignment:







3: Pin Assignment:

	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a
P2	b	b	b	b	b	b
P3	c	c	c	c	c	c
P4	d	d	d	d	d	d
P5	e	e	e	e	e	e
P6	f	f	f	f	f	f
P7	g	g	g	g	g	g
P8	DP	DP	DP	DP	DP	DP
P9	com	com	com	com	com	com
P10	▽	▽	▽	▽	▽	▽