D0107LT-33-0701A_Rev1A

Vacuum Fluorescent Display Module

RoHS Compliant

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Document Revision History

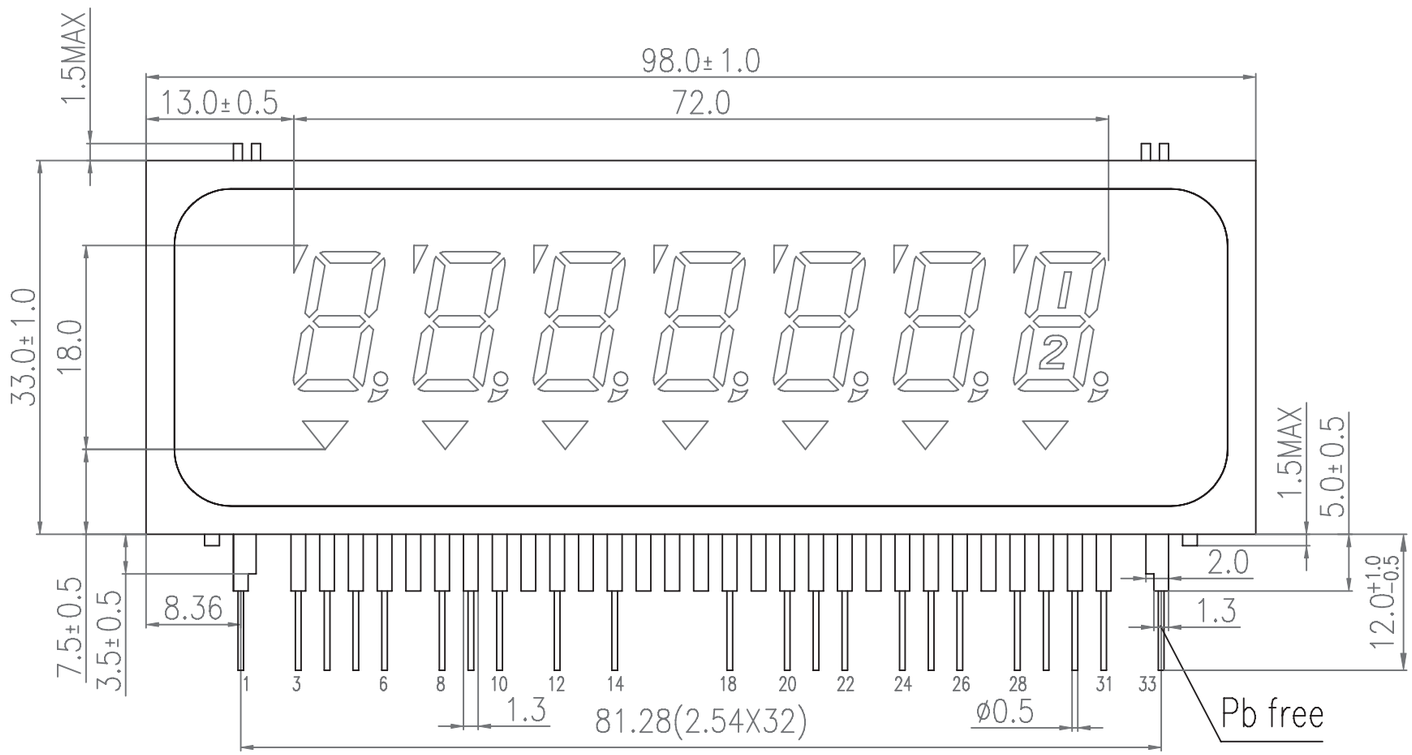
Revision	Date	Description	Changed by
0	4/26/03	Initial Release	-
1	6/2/20	Datasheet Reformat, Inclusion of 2D Mechanical Drawing Part Upgraded to Rev1A	AS
2	6/23/20	Inclusion of Grid Assignment & Anode Connection	AS

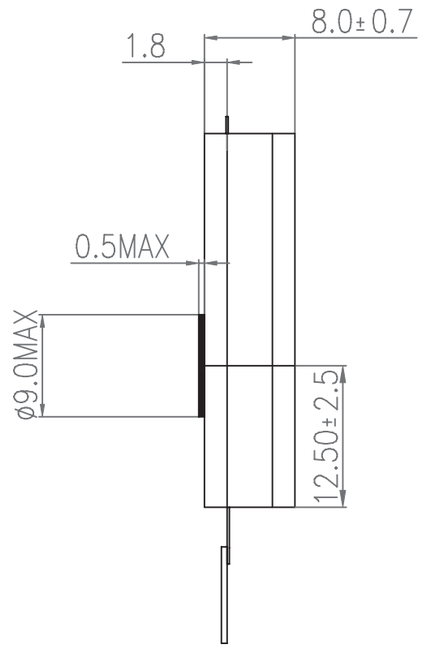
Functions and Features

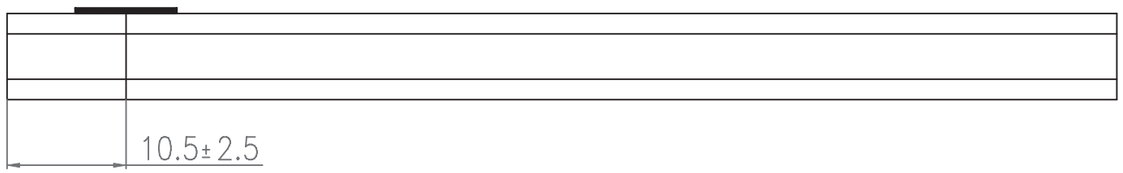
- **7 Digits**
- **7-Segmented**
- **Character Display (7-Segmented)**

Mechanical Drawing

SYMBOL	REVISION	DATE







(PIN CONNECTION)

(PIN NO.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
(CONNECTION)	F	NP	P1	P2	P3	7G	NX	P4	P5	6G	NX	P6	NX	5G	NX	NX	NX	4G
(PIN NO.)	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
(CONNECTION)	NX	P7	P8	3G	NX	P9	P10	2G	NX	P11	P12	1G	P13	NP	F			

Note : F: (Filament) P: (Anode) G: (Grid) NP: (No pin) NX: (No extend pin)

Notes:

1. Panel Length: 98.0 +/- 1.0mm
2. Panel Height: 33.0 +/- 1.0mm
3. Panel Thickness: 8.0 +/- 0.7mm
4. Illumination Color: Green

STANDARD TOLERANCE: (UNLESS OTHERWISE SPECIFIED) LINEAR: ±0.3mm	NEWHAVEN DISPLAY INTERNATIONAL	
	DRAWING/PART NUMBER: NHD-0107LT-33-0701A	REVISION: 1A
UNLESS OTHERWISE SPECIFIED: - DIMENSIONS ARE IN MILLIMETERS - THIRD ANGLE PROJECTION	DRAWN BY: A. Shah / APPROVED BY: A. Shah	SIZE: A3
	DRAWN DATE: 6/2/20 / APPROVED DATE: 6/2/20	SCALE: NS
	DO NOT SCALE DRAWING	SHEET 1 OF 1

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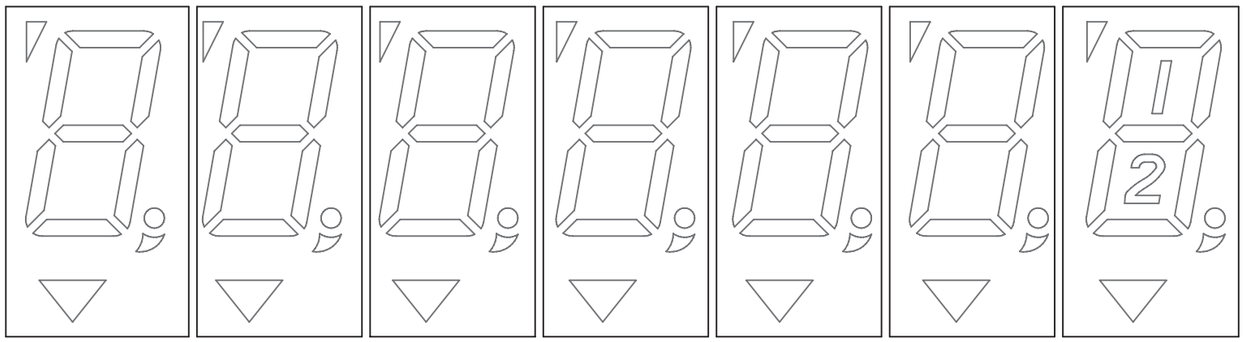
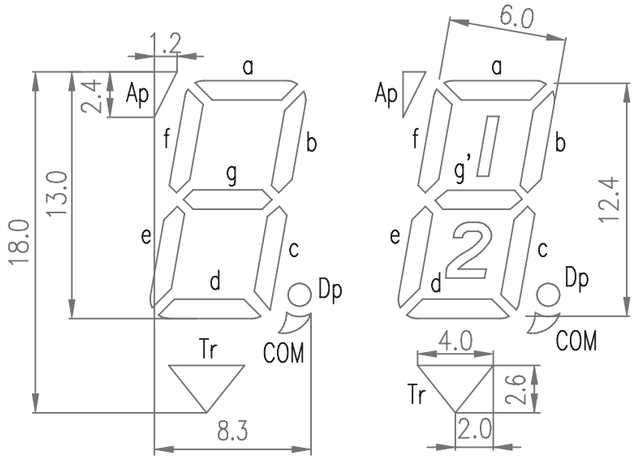
Grid Assignment + Anode Connection

SYMBOL	REVISION	DATE





	1G	2G	3G	4G	5G	6G	7G
P1	Ap	Ap	Ap	Ap	Ap	Ap	Ap
P2	f	f	f	f	f	f	f
P3	—	g	g	g	g	g	g
P4	e	e	e	e	e	e	e
P5	d	d	d	d	d	d	d
P6	Tr	Tr	Tr	Tr	Tr	Tr	Tr
P7	COM	COM	COM	COM	COM	COM	COM
P8	DP	DP	DP	DP	DP	DP	DP
P9	c	c	c	c	c	c	c
P10	1 2	—	—	—	—	—	—
P11	g'	—	—	—	—	—	—
P12	b	b	b	b	b	b	b
P13	a	a	a	a	a	a	a

STANDARD TOLERANCE:
(UNLESS OTHERWISE SPECIFIED)

LINEAR: ±0.3mm

NEWHAVEN DISPLAY INTERNATIONAL

DRAWING/PART NUMBER: NHD-0107LT-33-0701A

REVISION: 1A

SIZE: A3

SCALE: NS

UNLESS OTHERWISE SPECIFIED:
- DIMENSIONS ARE IN MILLIMETERS
- THIRD ANGLE PROJECTION

DRAWN BY: A. Shah

APPROVED BY: A. Shah

DRAWN DATE: 6/23/20

APPROVED DATE: 6/23/20

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SHEET 1 OF 1

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Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Operating Temperature Range	T_{OP}	Absolute Max	-20	-	+70	^oC
Storage Temperature Range	T_{ST}	Absolute Max	-55	-	+80	^oC
Filament Voltage	E_F	-	2.97	3.3	3.63	Vac
Peak Grid Voltage	E_C	-	31.5	35	38.5	Vp-p
Peak Anode Voltage	E_B	-	31.5	35	38.5	Vp-p
Filament Current	I_F	E_F = 3.3Vac $E_B = E_C = 0$	121	135	149	mAac
Anode Current	I_B/1G-7G	E_F = 3.3Vac E_B = 35.0Vp-p E_C = 35.0Vp-p D_U = 1/10 T_P = 100 µS	-	6	12	mAp-p
Grid Current	I_B/1G-7G		-	7	14	mAp-p
Luminance	L_G		430	860	-	Cd/m^2
Luminance Ratio	Lmax/min	-	-	-	2	-
Grid Cut-off Voltage	E_{CCO}	E_F = 3.3Vac E_B = 35.0Vdc	-4	-	-	Vdc
Anode Cut-off Voltage	E_{BCO}	E_F = 3.3Vac E_C = 35.0Vdc D_U = 1/10 T_P = 100 µS	-2	-	-	Vdc
Duty Cycle	D_U	-	-	1/10	-	-
Pulse Width	T_P	-	-	100	-	µS