

User's Guide

D0111LT-33-1101

VFD

(Vacuum Fluorescent Display Character Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: **D0111LT-33-1101**

FEATURES: 11 Digits, 7-Segmented, Instrumentation, Scales

APPLICATION: Character Display (7-Segmented)

RATINGS: Below

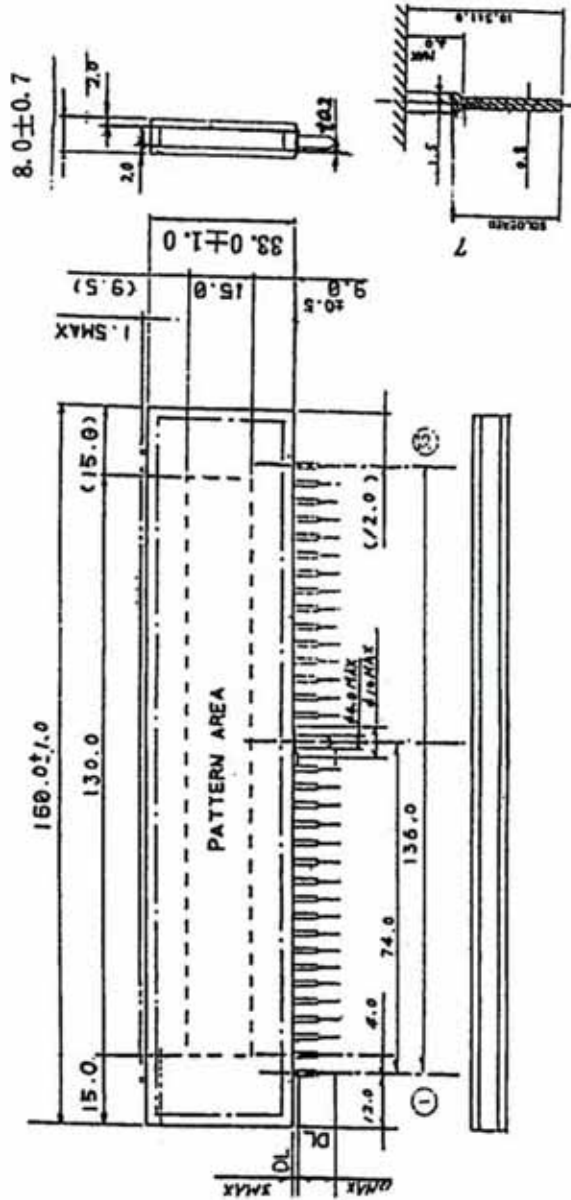
Outer Dimensions	Panel Length	P.L.	160.0	mm	
	Panel Height	P.H.	33.0	mm	
	Panel Thickness	P.T.	8.0	mm	
Leads	Lead Pitch	L.P.	4.0	mm	
	Lead Out	-	SIL		
Character Size	Character Height	C.H.	12.5	mm	
	Character Width	C.W.	6.3	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	5.5	6.1	6.7	Vac
Peak Grid Voltage	ec	-	28.0	36.0	Vp-p
Peak Anode Voltage	eb	-	28.0	36.0	Vp-p
Life	tp	10,000	-	-	Hrs
Duty Cycle	Du	-	1/12.5	-	-
Pulse Width	tp	-	80	-	uS
Operating Temperature	Topr	-40	-	+ 85	C
Storage Temperature	Tstg	-50	-	+ 95	C
Color of Illumination	Green				

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Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	If -	Ef = 6.1 V _{dc} eb = ec = 0	117.0 -	130.0 -	143.0 -	mA _{dc} -
Anode Current	ib/1G~11G - - - - -	Ef = 6.1 V _{ac} eb = 28.0 V _{p-p} ec = 28.0 V _{p-p} Du = 1/12.5 tp = 80 uS All Segments Lit	- - - - -	8.0 - - - -	17.0 - - - -	mA _{p-p} mA _{p-p} mA _{p-p} mA _{p-p} mA _{p-p}
Grid Current	ic / 1G~11G - - - -		- - - - -	11.0 - - - -	18.1 - - - -	MA _{p-p} MA _{p-p} MA _{p-p} MA _{p-p} MA _{p-p}
Luminance	L(G) -		343 (100)	686 (200)	- -	cd/m ² fL
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 6.1 V _{dc} eb = 28.0 V _{dc} All Segments Lit	-7.0	-	-	V _{dc}
Anode Cut-off Voltage	Ebco	Ef = 6.1 V _{ac} ec = 28.0 V _{p-p} Du = 1/12.5 tp = 80uS	-7.0	-	-	V _{dc}

OUTLINE DRAWING (UNIT :mm)



TERMINAL CONNECTION

TERMINAL NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
ELECTRODE	F	NC	11G	NC	P7	10G	P6	P5	9G	P4	P9	8G	P10	P14	7G	P13	P12	6G	5G	P11	P8	4G	P3	P2	3G	NC	P1	2G	P16	P15	1G	NC	F

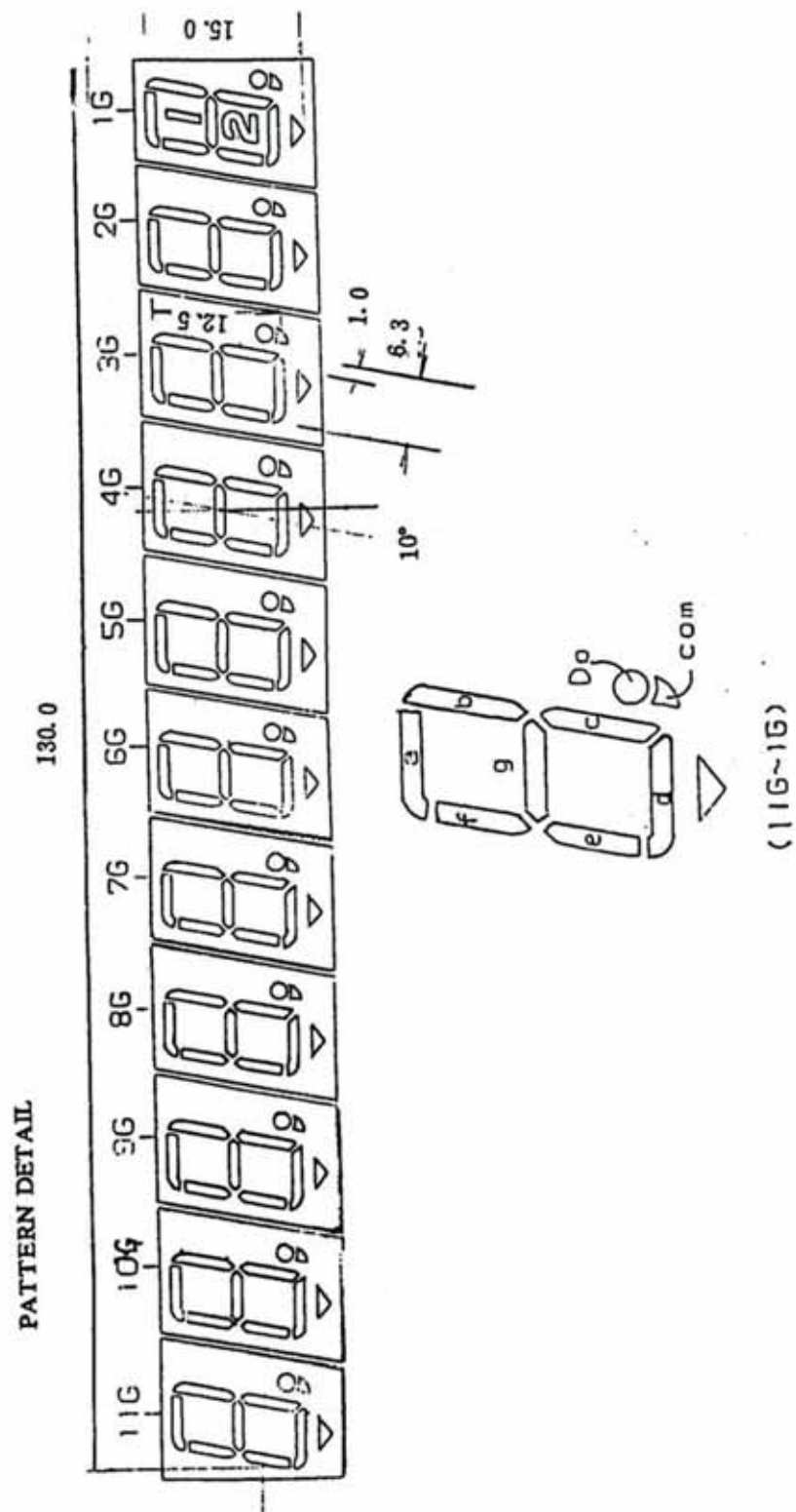
Notes:

F: Filament

G: Grid

P: Anode

NC: Connection



ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a	a	a	a	a
P2	b	b	b	b	b	b	b	b	b	b	b
P3	c	c	c	c	c	c	c	c	c	c	c
P4	d	d	d	d	d	d	d	d	d	d	d
P5	e	e	e	e	e	e	e	e	e	e	e
P6	f	f	f	f	f	f	f	f	f	f	f
P7	g	g	g	g	g	g	g	g	g	g	-
P8	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp
P9	com	com	com	com	com	com	com	com	com	com	com
P10	-	▽	▽	-	▽	▽	-	▽	▽	-	▽
P11	-	-	-	-	-	-	-	-	-	▽	-
P12	-	-	-	-	-	-	▽	-	-	-	-
P13	-	-	-	▽	-	-	-	-	-	-	-
P14	▽	-	-	-	-	-	-	-	-	-	-
P15	-	-	-	-	-	-	-	-	-	-	g
P16	-	-	-	-	-	-	-	-	-	-	g