

User's Guide

D0120MY-A1H

VFD - **RoHS Compliant** (Vacuum Fluorescent Character Display Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: D0120MY-A1H

FEATURES: 20 Digits, Alphanumeric, Decimal point + Apostrophe

APPLICATION: Character Display (*Alphanumeric*)

RATINGS: Below

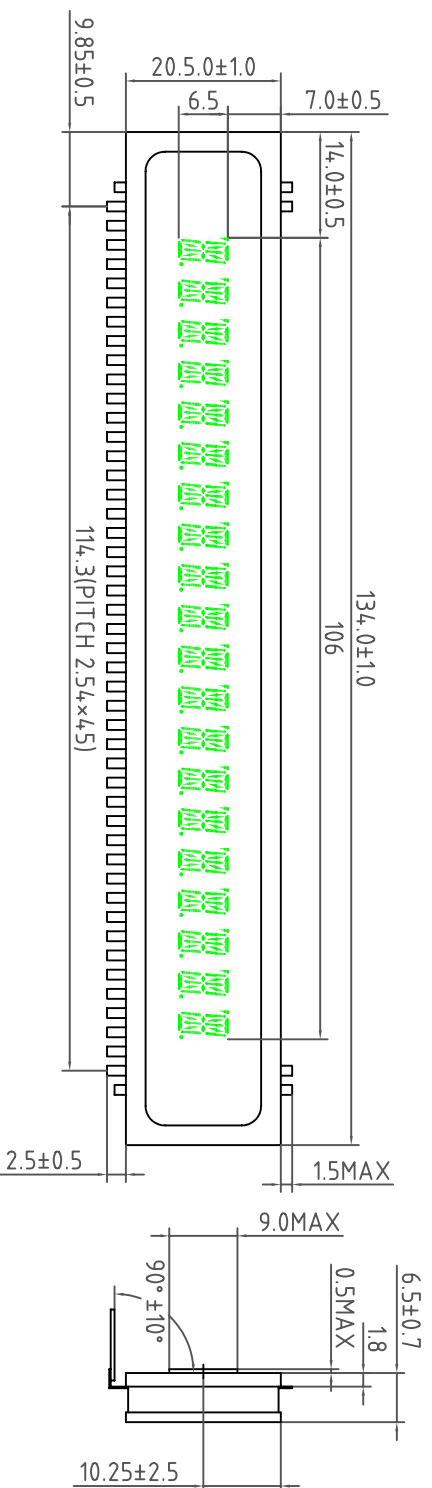
Outer Dimensions	Panel Length	P.L.	134.0	mm	
	Panel Height	P.H.	20.5	mm	
	Panel Thickness	P.T.	6.5	mm	
Leads	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	SIL		
Character Size	Character Height	C.H.	6.5	mm	
	Character Width	C.W.	3.0	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	5.22	5.8	6.38	Vac
Peak Grid Voltage	ec	-	32.0	39.0	Vp-p
Peak Anode Voltage	eb	-	32.0	39.0	Vp-p
Cut-off Bias	Ek	-	-	-	-
Duty Cycle	Du	-	1/ 24	-	-
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 = 5.8 Vac eb = ec = 0	54.0 -	60.0 -	66.0 -	mAac -
Anode Current	ib/1~20G - - - -	Ef = 5.6 Vac eb = 32.0 Vp-p ec = 32.0 Vp-p Du = 1/24 tp = 100 uS	- - - - -	3.5 - - - -	7.0 - - - -	mAp-p mAp-p mAp-p mAp-p mAp-p
Grid Current	ic/1~20G - - - -	All Segs are lit	- - - - -	3.5 - - - -	7.0 - - - -	mAp-p mAp-p mAp-p mAp-p mAp-p
Luminance	L(G) -		514 (150)	1028 (300)	-	cd/m ² fL
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 5.8 Vac Eb = 32.0 Vdc	-7.0	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 5.8 Vac ec = 32.0 Vp-p Du = 1/24 tp = 100 uS	-4.0	-	-	Vdc

* Drive Mode is Dynamic State

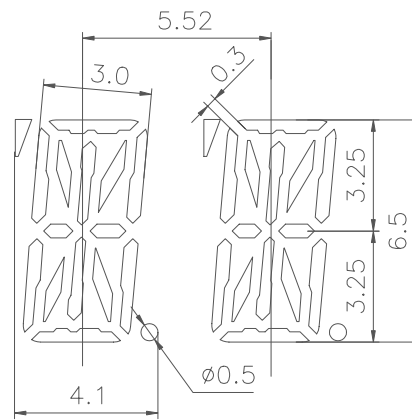
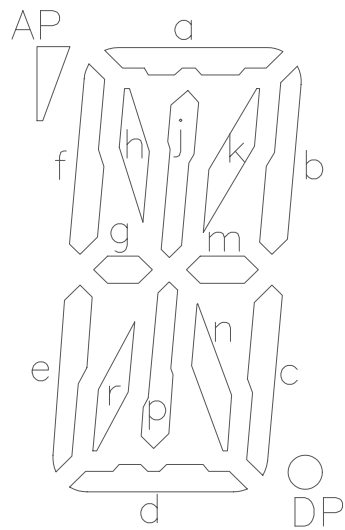
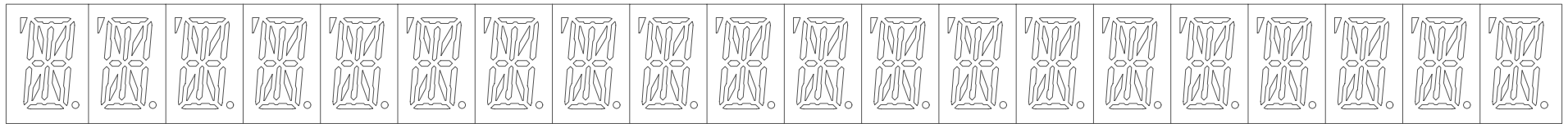


Pin No. :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Connect :	F	P1	P2	P3	P4	P5	P6	P7	P8	20G	19G	18G	17G	16G	15G	14G	13G	12G	11G	NP	NP	NP	NP
Pin No. :	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Connect :	NP	NP	NP	NP	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P9	P10	P11	P12	P13	P14	P15	P16	F

Grid separation, Anode designation, Font Pattern

20G

1G



COLOR: Green

TERMINAL CONNECTION Table

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G	17G	18G	19G	20G
P1	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
P2	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
P3	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
P4	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
P5	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
P6	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
P7	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP	DP
P8	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
P9	c	c	c	c	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	m	m	m	m
P11	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
P12	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h
P13	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k
P14	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j
P15	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
P16	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a