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#### User's Guide

# **D0120MY-A1H**

VFD - RoHS Compliant (Vacuum Fluorescent Character Display Module)

————For product support, contact

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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** 

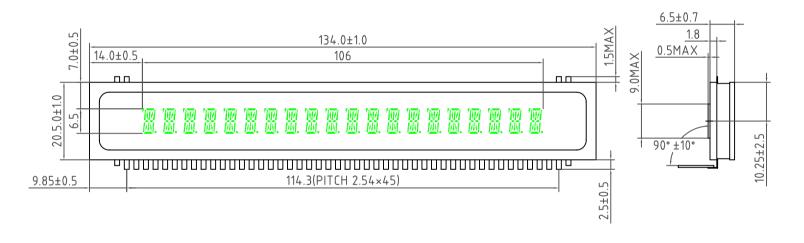
	Panel Length	า	P.L.	134.0	mm					
Outer Dimensions	Panel Height	t	P.H.	20.5	mm					
	Panel Thickr	ess	P.T.	6.5	mm					
Leads	Lead Pitch		L.P.	2.54	mm					
	Lead Out		-	SIL						
Character Size	Character He	eight	C.H.	6.5	mm					
	Character W	idth	C.W.	3.0	mm					
Item	Symbol	Min.	Recommended	Max.	Unit					
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	Du	-	1/ 24	-	-					
Cycle										
Pulse Width	tp	-	100	-	uS					
Operating Temperature	Topr	-20	-	+ 70	С					
Storage Temperature	Tstg	-55	-	+ 80	С					
Color of Illumination	Green									

#### D0120MY-A1H

# Electrical Characteristics

	Symbol	Test Condition	Min.	Typical	Max.	Unit	
Item							
	15	F( 50)/		22.2	22.2	•	
Filament Current	lf	Ef = 5.8 Vac	54.0	60.0	66.0	mAac	
	-	eb = ec = 0	-	-	-	-	
Anode Current	ib/1~20G	Ef = 5.6 Vac	_	3.5	7.0	m A n n	
Alloue Current	10/1~20G	eb = 32.0 Vp-p		3.5	7.0	mAp-p	
	_	ec = 32.0 Vp-p	-	-	-	mAp-p	
	-	Du = 1/24	-	-	-	mAp-p	
	_	tp = 100 uS	-	-	-	mAp-p mAp-p	
	-	ιρ = 100 uS	-	-	-	підр-р	
Grid Current	ic/1~20G	All Segs are lit	_	3.5	7.0	mAp-p	
	-	7 iii Gogo aro iii	_	-	-	mAp-p	
	_		_	_	-	mAp-p	
	_			_	-	mAp-p	
	_		_	-	-	mAp-p	
						т, ф р	
	L(G)		514	1028	-	cd/m <sup>2</sup>	
Luminance	-		(150)	(300)		fL	
			,				
	Lmin/Lmax						
Luminance Ratio			50	-	-	%	
	Ecco	Ef = 5.8 Vac					
Grid Cut-off Voltage		Eb = 32.0 Vdc	-7.0	_	-	Vdc	
· · · · · · · · · · · · · · · · · · ·							
	Ebco	Ef = 5.8 Vac					
Anode Cut-off Voltage		ec = 32.0 Vp-p	-4.0	-	-	Vdc	
		Du = 1/24					
		tp = 100 uS					

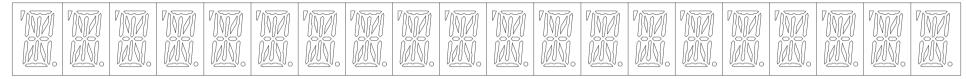
<sup>\*</sup> Drive Mode is Dynamic State

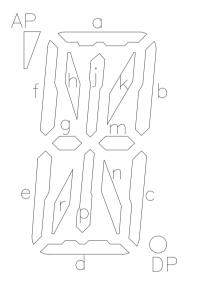


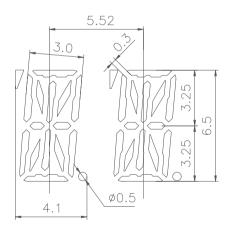
	16 17 18 19 20 21 22 2
Connect: F P1 P2 P3 P4 P5 P6 P7 P8 20G 19G 18G 17G 16G 15G	G 14G 13G 12G 11G NP NP NP N
Pin No. : 24   25   26   27   28   29   30   31   32   33   34   35   36   37   38	39   40   41   42   43   44   45   4
Connect: NP NP NP NP 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G P9	P10 P11 P12 P13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

## Grid separation, Anode designation, Font Pattern

20G







COLOR: Green

#### TERMINAL CONNECTION Table

	1 G	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	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е	е
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	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р	р
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	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С
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	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а