

User's Guide

D0220MD-48-4001F

VFD- **RoHS Compliant**

(Vacuum Fluorescent Display Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: D0220MD-48-4001F

FEATURES: 2 Row x 20 Digits, 5x7 Dot Matrix with Carrot – All

APPLICATION: Character Display (Dot Matrix)

RATINGS: Below

Outer Dimensions	Panel Length	P.L.	175.0	mm	
	Panel Height	P.H.	48.3	mm	
	Panel Thickness	P.T.	10.5	mm	
Leads	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	SIL		
Character Size	Character Height	C.H.	10.5	mm	
	Character Width	C.W.	5.5	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	6.4	7.1	7.8	Vac
Peak Grid Voltage	ec	-	52.0	58.0	Vp-p
Peak Anode Voltage	eb	-	52.0	58.0	Vp-p
-	-	-	-	-	-
Duty Cycle	Du	-	1/43	-	-
Pulse Width	tp	-	100	-	uS
Operating Temperature	Topr	-40	-	+ 85	C
Storage Temperature	Tstg	-50	-	+ 95	C
Color of Illumination	Green				

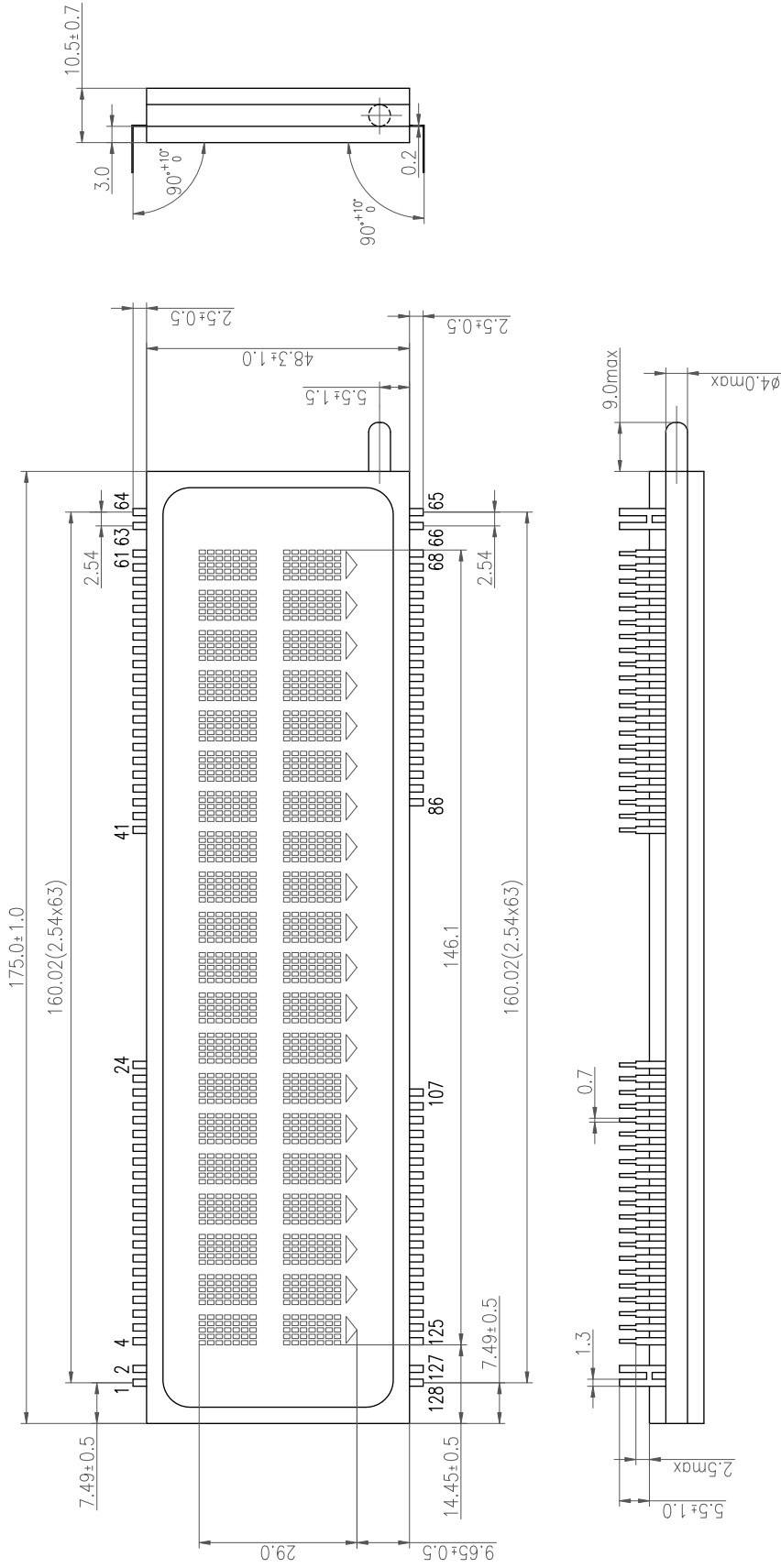
**Electrical
Characteristics**

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	lf	Ef = 7.1 Vac	247.5	275.0	302.5	mAac
	-	eb = ec = 0	-	-	-	-
Anode Current	ib/1~20G	Ef = 7.1 Vac eb = 52.0 Vp-p ec = 52.0 Vp-p Du = 1/43 tp = 100uS	-	13.0	26.0	mAp-p
	lb/21~40G		-	14.0	28.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Grid Current	ic/1~20G		-	11.5	23.0	mAp-p
	lc/21~40G		-	13.0	26.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Luminance	L(G)		350	700	-	cd/m ²
	-		(102)	(204)	-	fL
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 7.1 Vac Eb = 52.0 Vdc	-9.0	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 7.1 Vac ec = 52.0 Vp-p Du = 1/50	-6.0	-	-	Vdc

1: Outline Drawing

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外形图



管脚连接 Pin Connection

Pin Connection	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
端子序号	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
连接	F	NP	NC	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	16G	17G	18G	19G	20G	NP	NP	NP	NP	NP	NP	NP	NP	NP
端子序号	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
连接	NP	NP	NP	NP	NP	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	NC	NP	F	F	
端子序号	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
连接	F	NP	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31	P32	P33	P34	P35	P36	40G	39G	NC	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
端子序号	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
连接	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

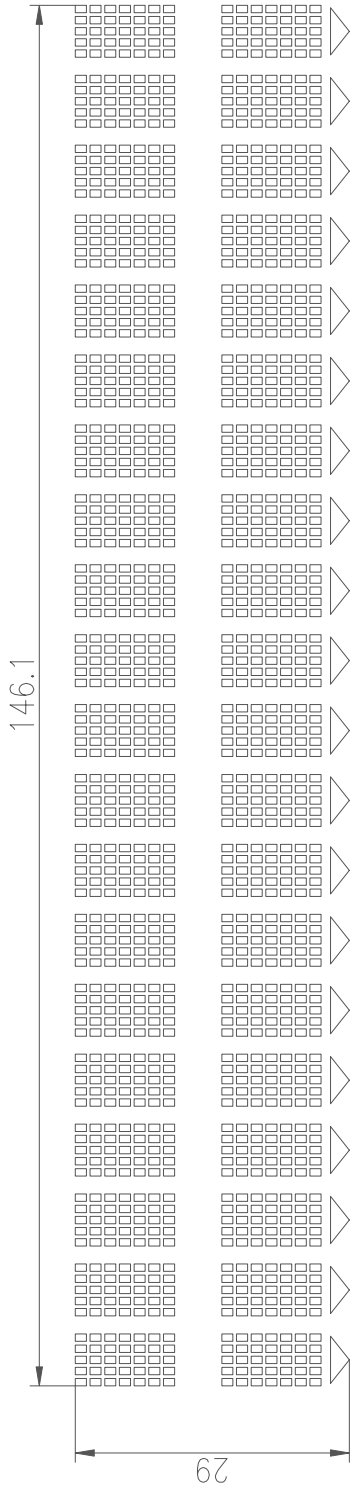
注：F：灯丝 NC：空脚 G：栅极 P：阳极 NP：无引出脚

Filament No Connect Grid Anode No Pin -3-

2: Display pattern

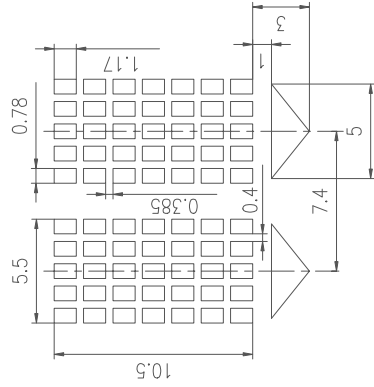
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显示面



显示颜色
绿色 (全部)

a11 a12 a13 a14 a15
 a21 a22 a23 a24 a25
 a31 a32 a33 a34 a35
 a41 a42 a43 a44 a45
 a51 a52 a53 a54 a55
 a61 a62 a63 a64 a65
 a71 a72 a73 a74 a75
 a81 a82 a83 a84 a85
 a91 a92 a93 a94 a95
 a101 a102 a103 a104 a105
 a111 a112 a113 a114 a115
 a121 a122 a123 a124 a125
 a131 a132 a133 a134 a135
 a141 a142 a143 a144 a145
 a151 a152 a153 a154 a155
 a161 a162 a163 a164 a165
 a171 a172 a173 a174 a175
 a181 a182 a183 a184 a185
 a191 a192 a193 a194 a195
 a201 a202 a203 a204 a205
 a211 a212 a213 a214 a215
 a221 a222 a223 a224 a225
 a231 a232 a233 a234 a235
 a241 a242 a243 a244 a245
 a251 a252 a253 a254 a255
 a261 a262 a263 a264 a265
 a271 a272 a273 a274 a275
 a281 a282 a283 a284 a285
 a291 a292 a293 a294 a295
 a301 a302 a303 a304 a305
 a311 a312 a313 a314 a315
 a321 a322 a323 a324 a325
 a331 a332 a333 a334 a335
 a341 a342 a343 a344 a345
 a351 a352 a353 a354 a355
 a361 a362 a363 a364 a365
 a371 a372 a373 a374 a375
 a381 a382 a383 a384 a385
 a391 a392 a393 a394 a395
 a401 a402 a403 a404 a405



栅网分割 (1G~40G)

