

## User's Guide

# D0220SD-35-4002FN

# VFD- **RoHS Compliant**

(Vacuum Fluorescent Display Module)

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## Vacuum Fluorescent Display Specification

**PART NUMBER:** D0220SD-35-4002FN

**FEATURES:** 2x20 Digits – 5x7 dot matrix, Pb-Free, No exhaust tip

**APPLICATION:** Character Display- Dot Matrix

**RATINGS:** Below

<b>Outer Dimensions</b>	Panel Length	P.L.	125.0	mm	
	Panel Height	P.H.	35.0	mm	
	Panel Thickness	P.T.	7.8	mm	
<b>Leads</b>	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	DIL		
<b>Character Size</b>	Character Height	C.H.	5.0	mm	
	Character Width	C.W.	3.5	mm	
<b>Item</b>	<b>Symbol</b>	<b>Min.</b>	<b>Recommended</b>	<b>Max.</b>	<b>Unit</b>
<b>Filament Voltage</b>	Ef	4.8	5.3	5.8	Vac
<b>Peak Grid Voltage</b>	ec	-	50.0	60.0	Vp-p
<b>Peak Anode Voltage</b>	eb	-	50.0	60.0	Vp-p
<b>Cut-off Bias</b>	Ek	-	0	-	Vdc
<b>Duty Cycle</b>	Du	-	1/45	-	-
<b>Pulse Width</b>	tp	-	100	-	uS
<b>Operating Temperature</b>	Topr	-40	-	+ 85	C
<b>Storage Temperature</b>	Tstg	-50	-	+ 85	C
<b>Color of Illumination</b>	Green				

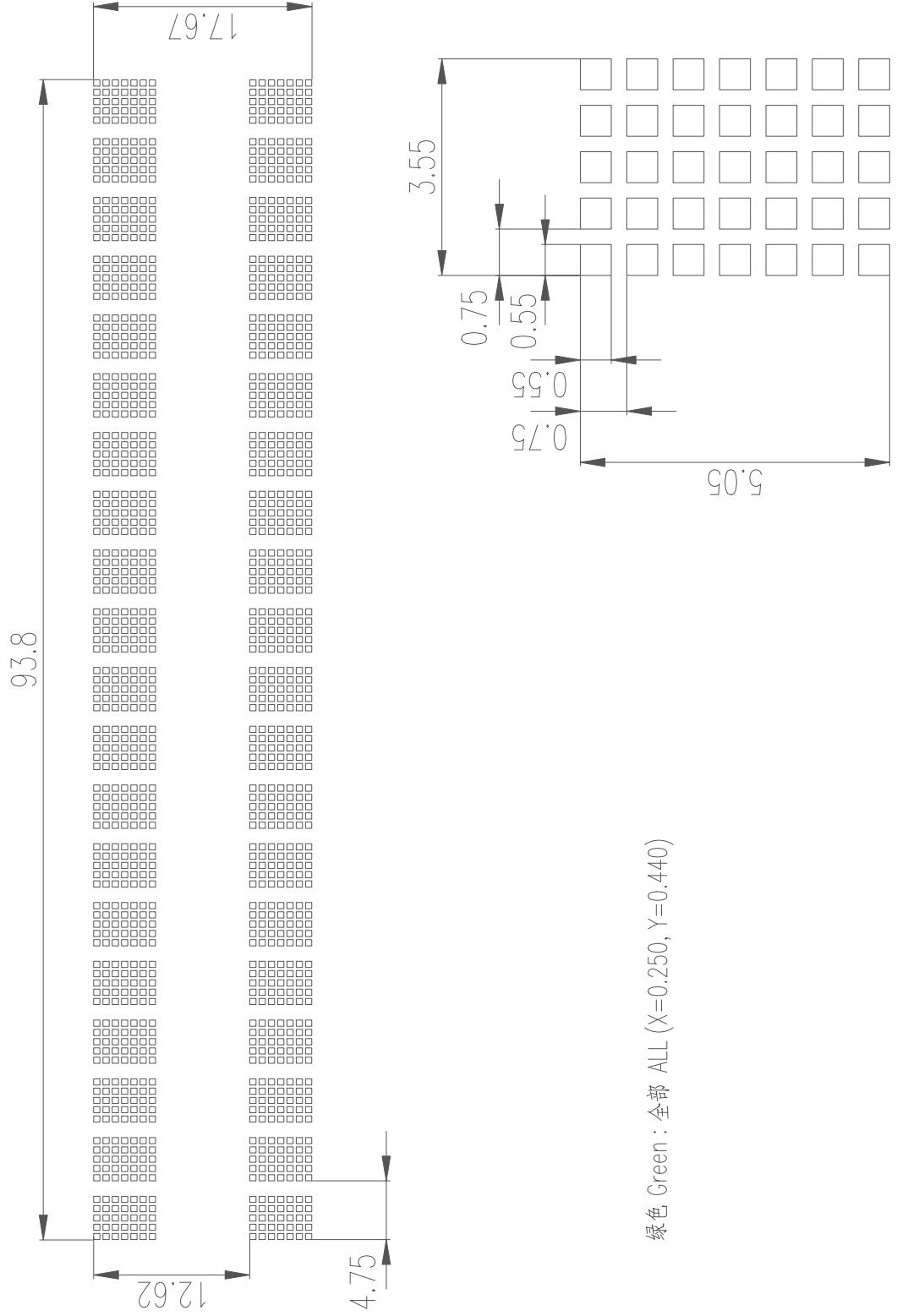
**Electrical  
Characteristics**

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
<b>Filament Current</b>	if	Ef = 5.3 Vac	108.0	120.0	132.0	mAac
	-	eb = ec = 0	-	-	-	-
<b>Anode Current</b>	ib / 1~40G	Ef = 5.3 Vac	-	4.0	8.0	mAp-p
	-	eb = 50.0 Vp-p	-	-	-	-
	-	ec = 50.0 Vp-p	-	-	-	-
	-	Du = 1/45	-	-	-	-
	-	tp = 100uS	-	-	-	-
<b>Grid Current</b>	ic / 1~40G	( All segs are ON )	-	8.0	16.0	mAp-p
	-		-	-	-	-
	-		-	-	-	-
	-		-	-	-	-
	-		-	-	-	-
<b>Luminance</b>	L(G)		427	855	-	cd/m <sup>2</sup>
	-		(125)	(250)		fL
<b>Luminance Ratio</b>	Lmin/Lmax		50	-	-	%
<b>Grid Cut-off Voltage</b>	Ecco	Ef = 5.3 Vac Eb = 50.0 Vdc	-5.0	-	-	Vdc
<b>Anode Cut-off Voltage</b>	Ebco	Ef = 5.3 Vac ec = 50.0 Vp-p Du = 1/45 Tp = 100uS	-1.0	-	-	Vdc

**DRIVE MODE: Dynamic State**

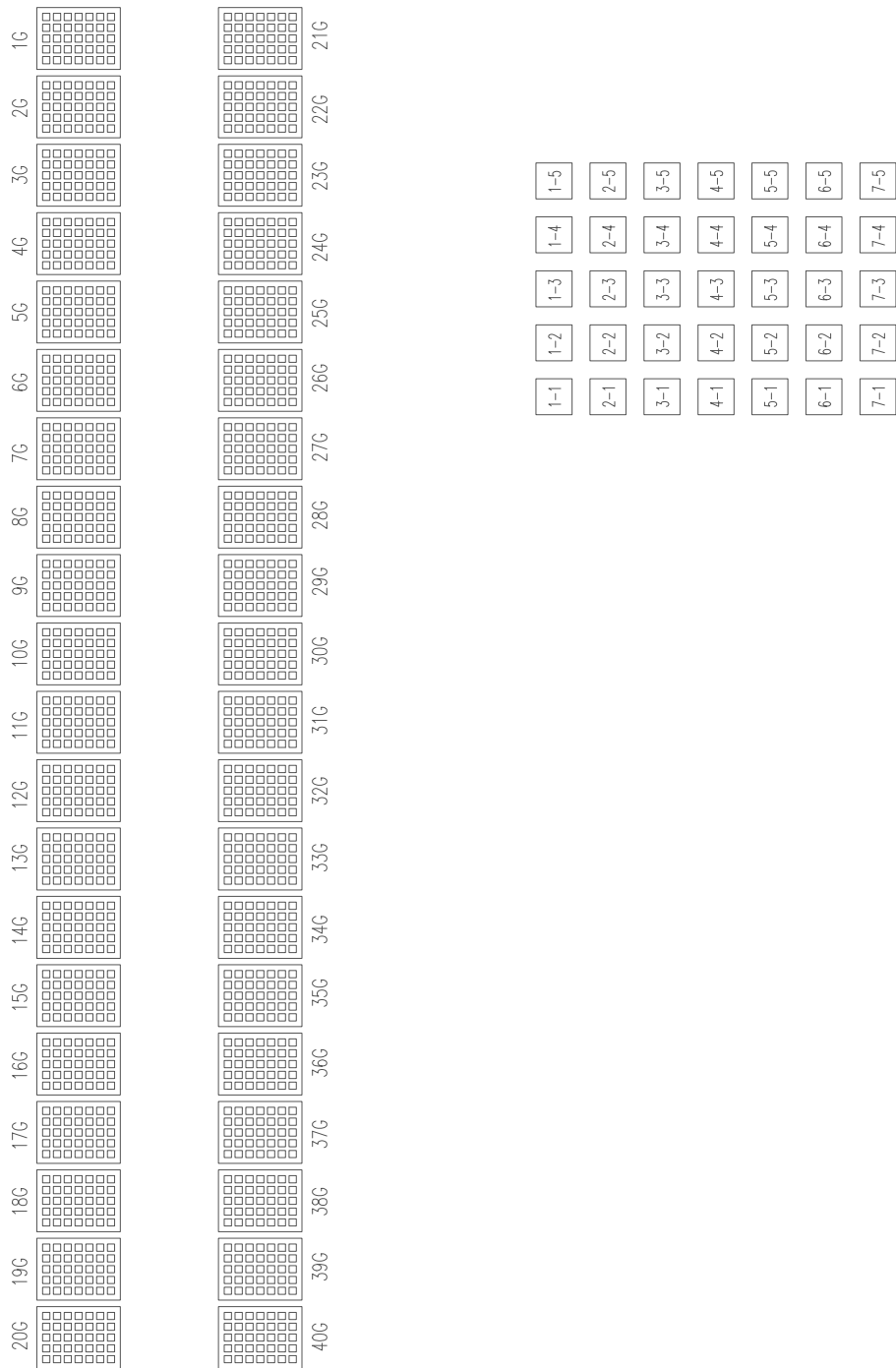


附图 2: 显示内容 Display Pattern



绿色 Green : 全部 ALL (X=0.250, Y=0.440)

附图 3: 栅网分割 Grid AAssignment



(1~40G)

附图 4: 阳极连接 Anode Connection

	1G~40G		1G~40G		1G~40G
P1	1-1	P15	3-5	P29	6-4
P2	1-2	P16	4-1	P30	6-5
P3	1-3	P17	4-2	P31	7-1
P4	1-4	P18	4-3	P32	7-2
P5	1-5	P19	4-4	P33	7-3
P6	2-1	P20	4-5	P34	7-4
P7	2-2	P21	5-1	P35	7-5
P8	2-3	P22	5-2		
P9	2-4	P23	5-3		
P10	2-5	P24	5-4		
P11	3-1	P25	5-5		
P12	3-2	P26	6-1		
P13	3-3	P27	6-2		
P14	3-4	P28	6-3		