

## User's Guide

# D0109MT-20-0901

# **VFD- RoHS Compliant**

(Vacuum Fluorescent Display Module)

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For product support, contact

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# Vacuum Fluorescent Display Specification

**PART NUMBER:** D0109MT-20-0901

**FEATURES:** 8 Digits, 7-Segmented, Automotive - **Measurement**

**APPLICATION:** Character Display (*7-Segmented*)

**RATINGS:** Below

<b>Outer Dimensions</b>	Panel Length	P.L.	100.0	mm	
	Panel Height	P.H.	20.5	mm	
	Panel Thickness	P.T.	6.5	mm	
<b>Leads</b>	Lead Pitch	L.P.	2.54	mm	
	Lead Out	-	SIL		
<b>Character Size</b>	Character Height	C.H.	8.0	mm	
	Character Width	C.W.	4.0	mm	
<b>Item</b>	<b>Symbol</b>	<b>Min.</b>	<b>Recommended</b>	<b>Max.</b>	<b>Unit</b>
<b>Filament Voltage</b>	Ef	3.42	3.80	4.18	Vac
<b>Peak Grid Voltage</b>	ec	10.8	40.0	50.0	Vp-p
<b>Peak Anode Voltage</b>	eb	10.8	40.0	50.0	Vp-p
-	tp	-	-	-	-
<b>Duty Cycle</b>	Du	-	1/15	-	-
<b>Pulse Width</b>	tp	-	100	-	uS
<b>Operating Temperature</b>	Topr	-20	-	+70	C
<b>Storage Temperature</b>	Tstg	-55	-	+ 85	C
<b>Color of Illumination</b>	Green				

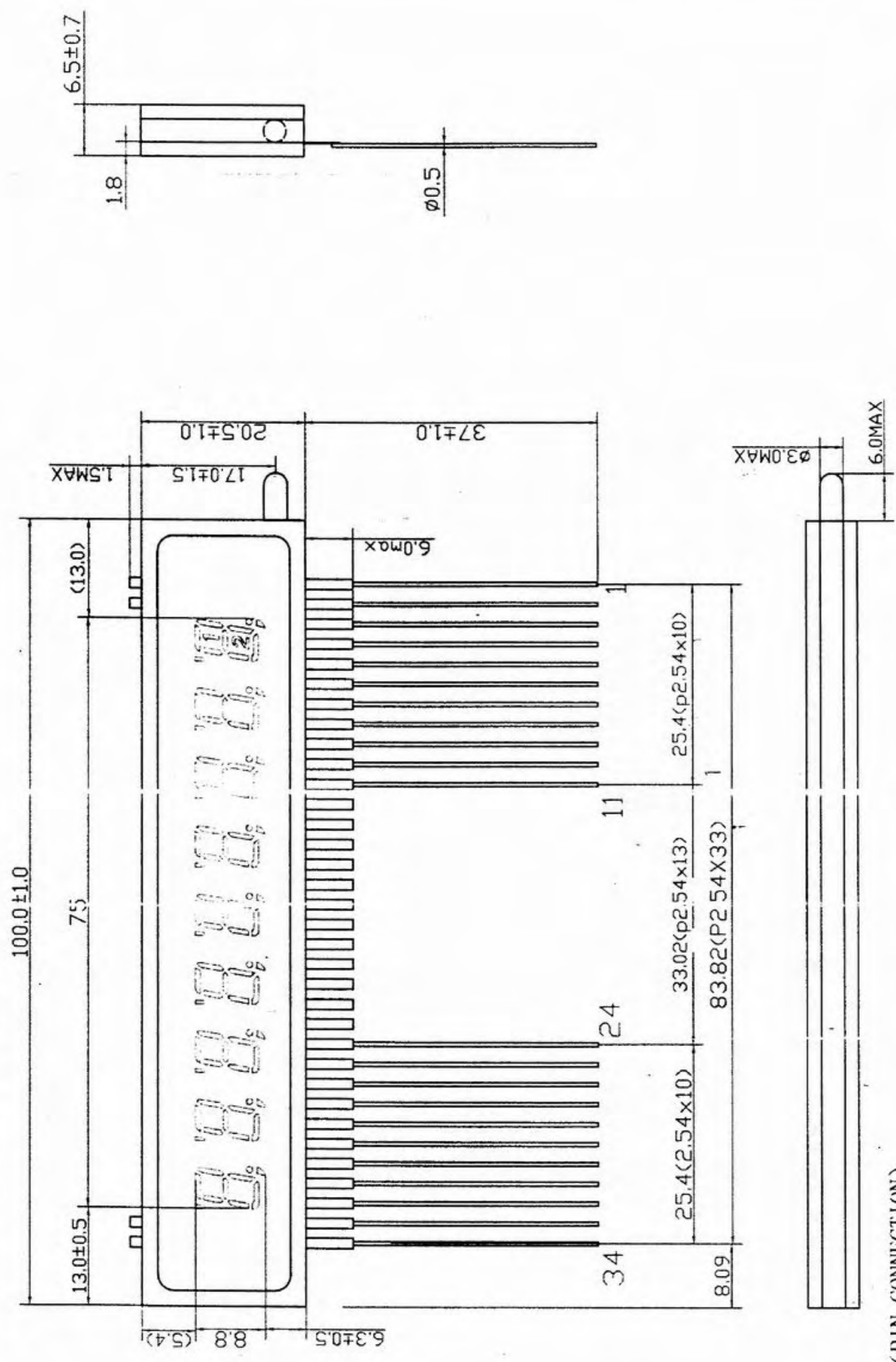
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**Electrical  
Characteristics**

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
<b>Filament Current</b>	lf	Ef = 3.8 Vac eb = ec = 0	97.2	108.0	118.8	mAac
	-		-	-	-	-
<b>Anode Current</b>	ib / 1G	Ef = 3.8 Vac eb = 40.0 Vp-p ec = 40.0 Vp-p Du = 1/15 tp = 100uS	-	9.0	18.0	mA <sub>p-p</sub>
	ib / 2~9G		-	8.0	16.0	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
<b>Grid Current</b>	ic / 1~9C		-	10.0	20.0	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
	-		-	-	-	mA <sub>p-p</sub>
<b>Luminance</b>	L(G)		500	1000	-	cd/m <sup>2</sup>
	-		(246)	(292)	-	fL
<b>Luminance Ratio</b>	Lmin/Lmax		50	-	-	%
<b>Grid Cut-off Voltage</b>	Ecco	Ef = 3.8 Vac eb = 40.0 Vdc	-4.5	-	-	Vdc
<b>Anode Cut-off Voltage</b>	Ebco	Ef = 3.8 Vac ec = 40.0 Vp-p  Du = 1/15 tp = 100uS	-4.5	-	-	Vdc

**Drive Mode = Dynamic State**

外形图 (OUTER DIMENSION) (UNIT IN mm)

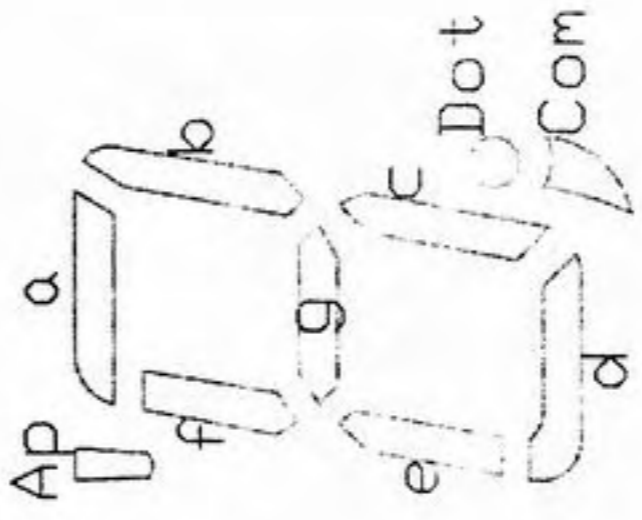
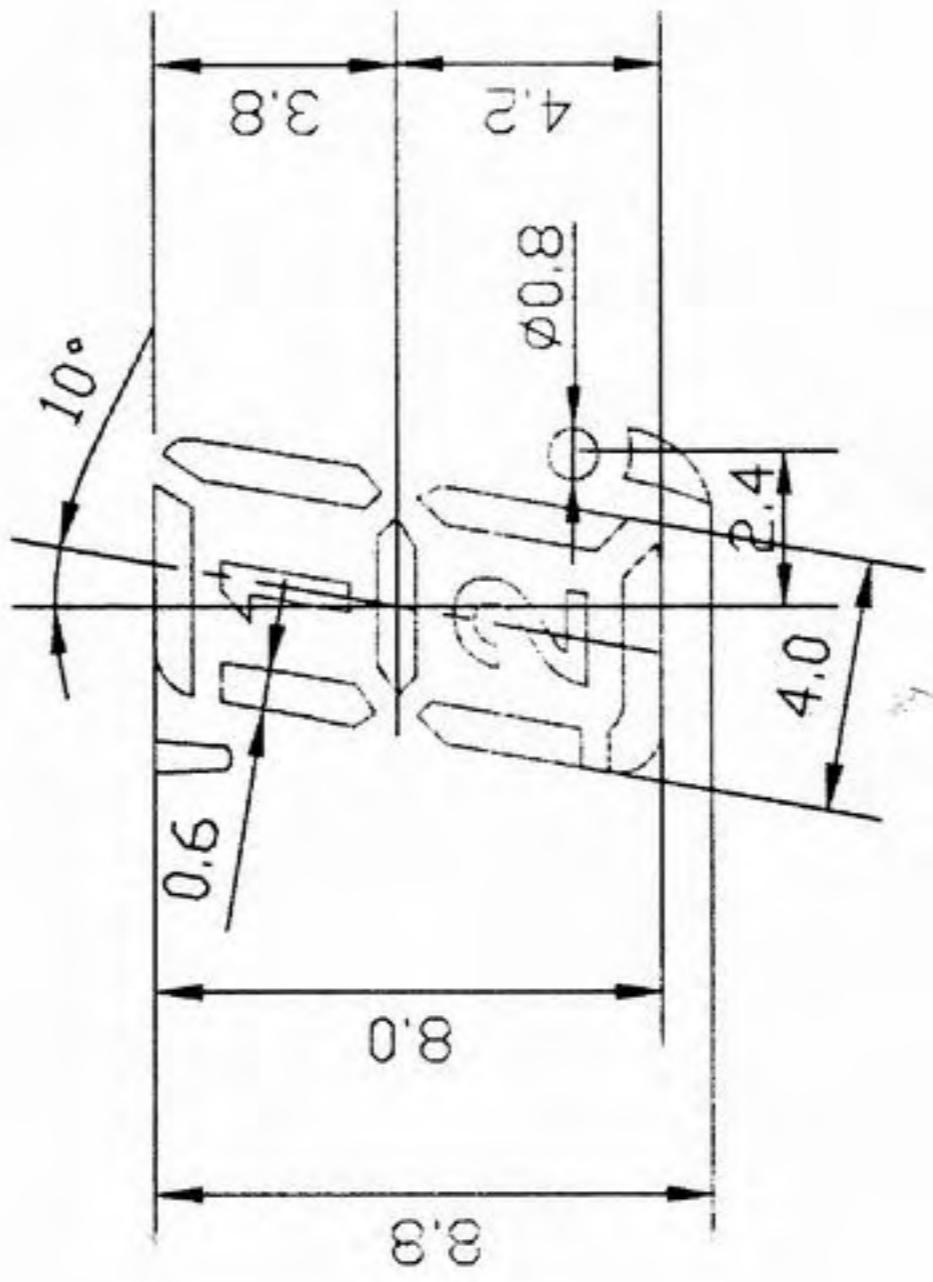
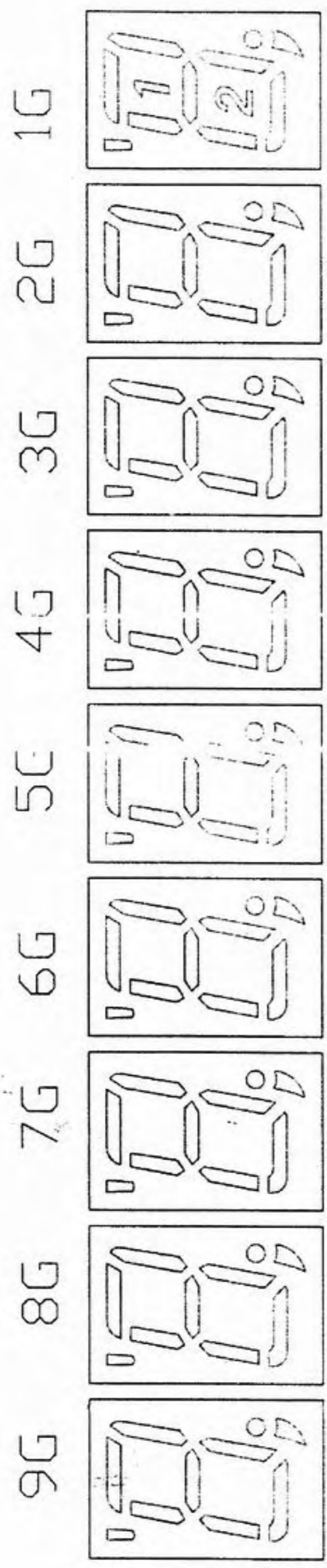


管脚连接 (PIN CONNECTION)

管脚序号 (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	24	25	26	27	28	29	30	31	32	33	34
连接(CONNECTION)	F	a	b	12	c	dot	com	1G	2G	3G	4	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5G	6G	7G	8G	9G	d	e	9	f	AP	F	

栅极分割: (GRID ASSIGNMENT)

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显示颜色(COLOR OF ILLUMINATION): 绿色

★GREEN★:X=0.250,Y=0.440

