



User's Guide

C-20-0403F

VFD

(Vacuum Fluorescent Character Display Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: C-20-0403F

FEATURES: 6 Digits, Seven Segmented, with Icons – DVD Player

APPLICATION: Character Display (7-Seg)

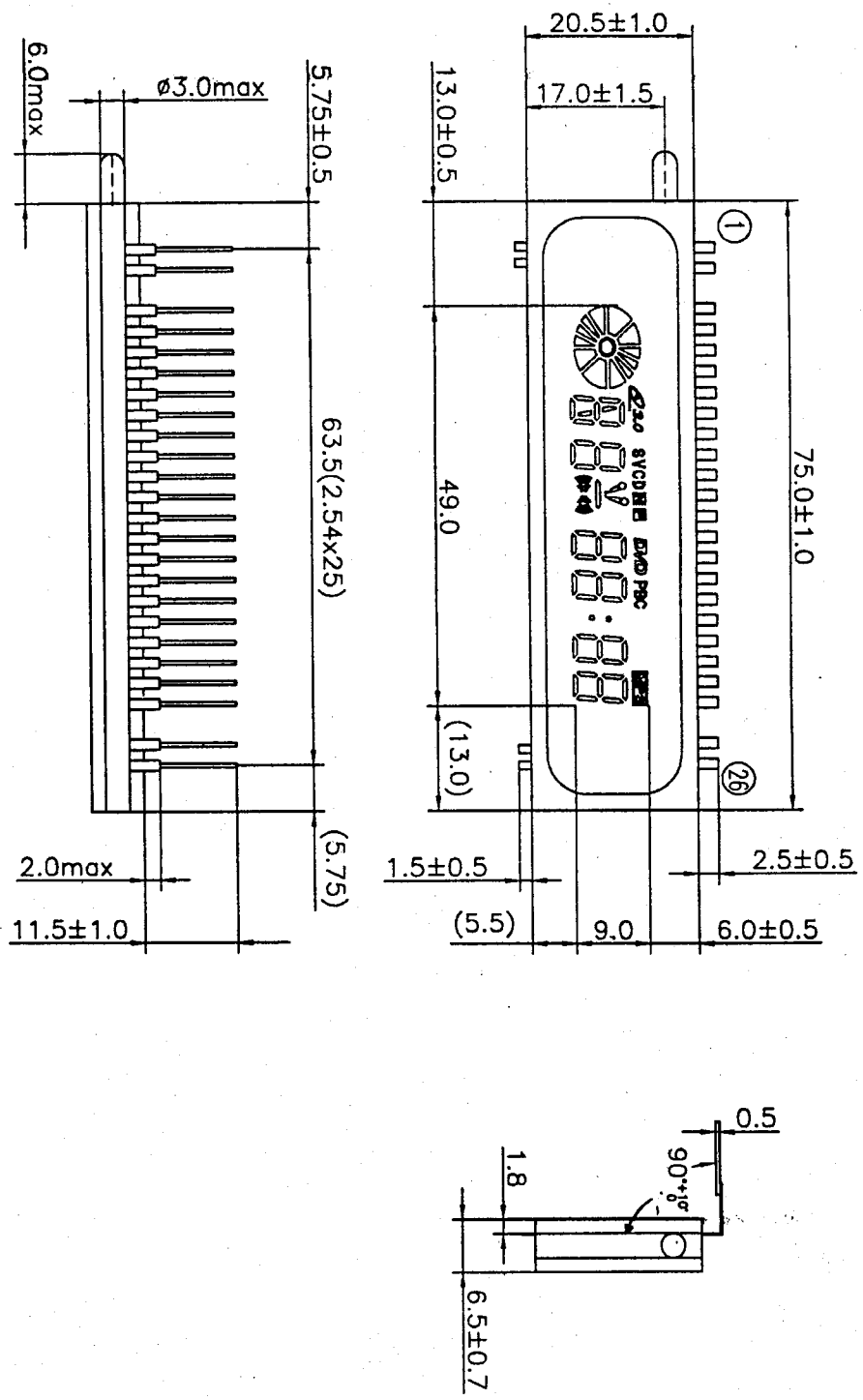
RATINGS: Below

Outer Dimensions	Panel Length	P.L.	75.0	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.	7.0	mm	
	Character Width	C.W.	3.2	mm	
Item	Symbol	Min.	Recommended	Max.	Unit
Filament Voltage	Ef	2.34	2.6	2.86	Vac
Peak Grid Voltage	Ec	-	21.0	25.0	Vp-p
Peak Anode Voltage	Eb	-	21.0	25.0	Vp-p
Cut-off Bias	Ek	-	-	-	-
Duty Cycle	Du	-	1/5	-	-
Pulse Width	Tp	-	100	-	uS
Operating Temperature	Topr	-20	-	+ 70	C
Storage Temperature	Tstg	-40	-	+ 85	C
Color of Illumination	Green / Yellow / Red				

Electrical Characteristics

Item	Symbol	Test Condition	Min.	Typical	Max.	Unit
Filament Current	lf -	Ef = 2.6 Vac eb = ec = 0	99.0 -	110.0 -	121.0 -	mAac -
Anode Current	ib/1~3G	Ef = 2.6 Vac eb = 21.0 Vp-p ec = 21.0 Vp-p Du = 1/5 tp = 100 uS	-	5.5	11.0	mAp-p
	ib/4G		-	9.0	18.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Grid Current	ic/1~3G		-	5.5	11.0	mAp-p
	ic/4G		-	9.0	18.0	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
	-		-	-	-	mAp-p
Luminance	L(G)		350 (102)	700 (204)	-	cd/m ² (fL)
	L(Y)		60 (17)	120 (34)		cd/m ² (fL)
	L(R)		34 (10)	68 (20)		cd/m ² (fL)
Luminance Ratio	Lmin/Lmax		50	-	-	%
Grid Cut-off Voltage	Ecco	Ef = 2.6 Vac Eb = 21.0 Vdc	-5.5	-	-	Vdc
Anode Cut-off Voltage	Ebco	Ef = 2.6 Vac ec = 21.0 Vp-p Du = 1/5 tp = 100 uS	-5.5	-	-	Vdc

: (OUTER DIMENSION)



(PIN CONNECTION)

(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
(CONNECTION)	F2	F2	NP	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	G	G	3G	4G	NP	F1	F1

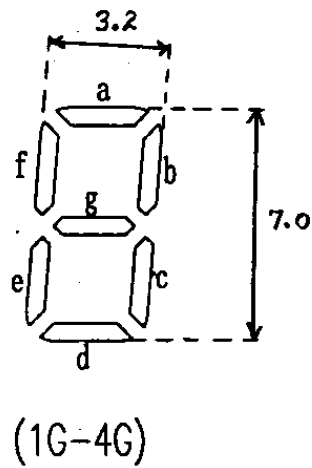
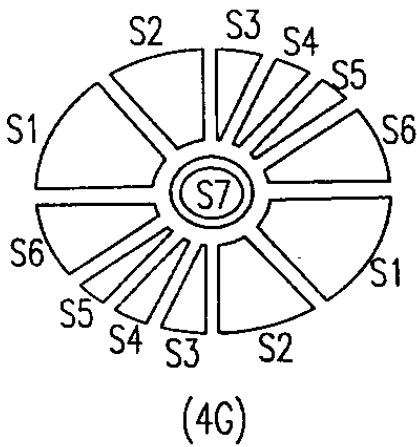
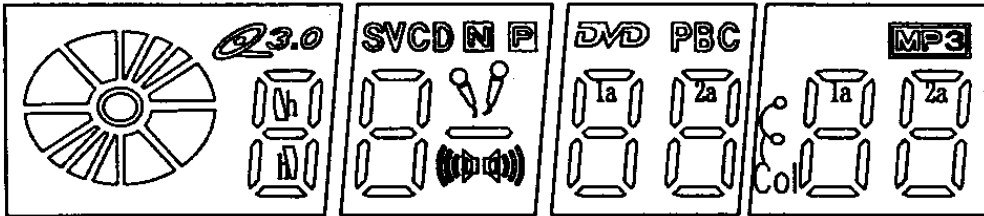
F: (Filament) P: (Anode) G: (Grid) NP: (No connection)

4G

3G

2G


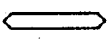


1G



(x=0.627,y=0.371) S3 S6

(x=0.527,y=0.465) S1 S4

(x=0.250,y=0.440)

	4G	3G	2G	1G
P1	S1	V	1a	1a
P2	S2	CD	1b	1b
P3	S3	P	1f	1f
P4	S4		1g	1g
P5	S5		1c	1c
P6	S6		1e	1e
P7	S7		1d	1d
P8	<i>Q3.0</i>	S	PBC	MP3
P9	a	a	2a	2a
P10	b	b	2b	2b
P11	f	f	2f	2f
P12	g	g	2g	2g
P13	c	c	2c	2c
P14	e	e	2e	2e
P15	d	d	2d	2d
P16	h	N	DVD	Col