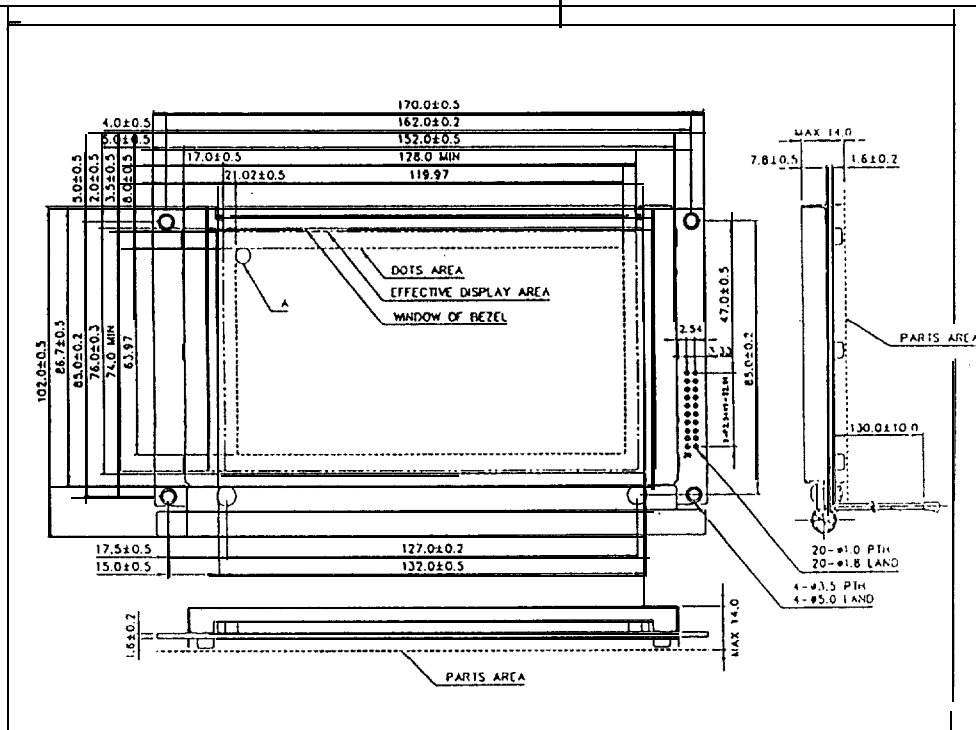


Features

- **240x128 Pixel**
40 Zeichen x 16 Zeilen
- **Mit T6963C Controller**
- **FSTN - Technologie**
- **Hoher Kontrast**
- **CFL Backlight**
- **Displayhelligkeit 80 cd/m²**
- **0,47x0,47mm Dotgröße**
- **0,03x0,03mm Dotspace**
- **schwarz/weiß, -blue -Mode**
- **6 : 00 (Standard) , 12: 00**
- **Module Abmessungen**
170 x 102 x 14,5
- **Effektive Displayfläche**
32 x 76



Elektrische und optische Spezifikation (Ta=25°C, Vdd=5,0V)

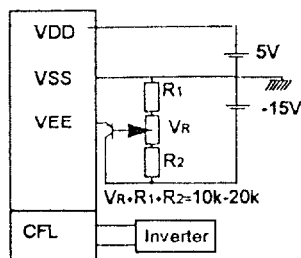
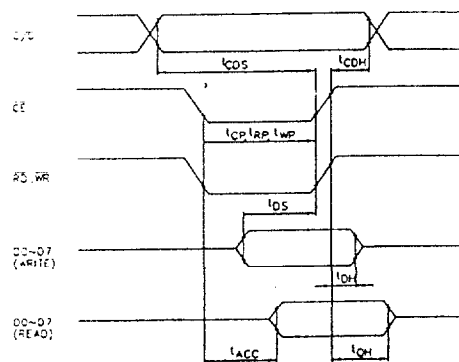
Beschreibung	Symbol	Min.	Typ.	Max.	Einheit	Testbedingung
Power supply Logik	VDD-VSS	4,5	5	5,5	V	
Input Voltage	V _{IH}	0,7V _{DD}	-	V _{DD}	V	H-Level
Input Voltage	V _{IL}	0	-	0,3V _{DD}	v	L-Level
Power Consumption	P _d	-	-	300,0	mW	V _{DD} =5V, V _{EE} = -10V
Supply current LCD	I _{LCD}	-	-	3,5	mA	V _{DD} =5V, V _{EE} = -10V
LC driving Voltage	V _{DD} -V _{EE}	17,05	17,8	18,55	V	-
Viewing angle	θ	50	-	-	deg	cr ≥2,0
Viewing angle	φ	-	-	-	+/- 40	Cr ≥2,0
Contrast ratio	Cr	-	25	-		φ=0°, θ=0°
Response time (rise)	T _r	200	400		ms	φ=0°, θ=0°
Response time (fall)	T _r	-	150	350	ms	φ=0°, θ=0°
Arbeitstemperatur	T _{op}	0	-	50	°C	
Lagertemperatur	T _{st}	-20	-	70	°C	
C/D Set up time	t _{cos}	100		-	ns	
C/D Hold Time	t _{cm}	10		-	ns	
CE, RD, WR clock width	t _{cp, trp, twp}	80	-	-	ns	
Data set up time	t _{ns}	80		-	ns	
Data hold time	t _{DH}	40		-	ns	
Access time	t _{acc}	-	150		ns	
Data output hold time	t _{oh}	10	-	50	ns	

Internal Pin Connection

Pin	Symbol	Funktion
1	FGND	Frame ground (0V)
2	VSS	0V Power supply , GND
3	VDD	Power Supply for Logic +5V
4	VEE	Power Supply for LC-Driving
5	WR	Data Write
6	RD	Data Read
7	CE	Chip Enable
8	C/D	Command Write Status Read Data Write Data Read WR="L" C/D="H" RD="L" C/D="H" WR="L" C/D="L" RD="L" C/D="L"
9	NC	No Connection
10	RESET	Controller Reset
11	D0	Data Input / Output
12	D1	Data Input / Output
13	D2	Data Input / Output
14	D3	Data Input / Output
15	D4	Data Input / Output
16	D5	Data Input / Output
17	D6	Data Input / Output
18	D7	Data Input / Output
19	FS	Font Selected=VDD 8x8 Pixel/Character FS=GND 8x8 Pixel/Character
20	RV	Reverse

CFL Connector (JAE-Stecker Typ IL-G-5S-S3C2)

Pin	Symbol	Funktion
1	VFL	Power supply for CFL
2	NC	No connection
3	NC	No connection
4	NC	No connection
5	VFL	Power supply for CFL



Power supply

BESTELLINFORMATIONEN

Beschreibung	Bestellnummer
LCD-Modul,schwarz/weiß,CFL	187445
CFL-Inverter	183571