

DG series

DG-24064 240 X 64 Dots

Mechanical Data

Item	Standard Value	Unit
Module Size	180.0(W) x 65.0(H) x 10.0(T)	mm
Viewing Area	132.0(W) x 39.0 (H)	mm
Dot Pixels	240 x 64	dots
Dot Size	0.49 x 0.49	mm
Dot Pitch	0.53 x 0.53	mm

Absolute Maximum Ratings

Item	Symbol	Standard Value			Unit
		Min.	Typ.	Max.	
Supply Voltage for Logic	$V_{dd}-V_{ss}$	-0.3	--	7.0	V
Supply Voltage for LCD Drive	$V_{dd}-V_{ee}$	-0.3	--	28.0	V
Input Voltage	V_I	-0.3	--	$V_{dd}+0.3$	V
Operation Temperature	T_{opr}	0	--	50	°C
Storage Temperature	T_{stg}	-20	--	60	°C

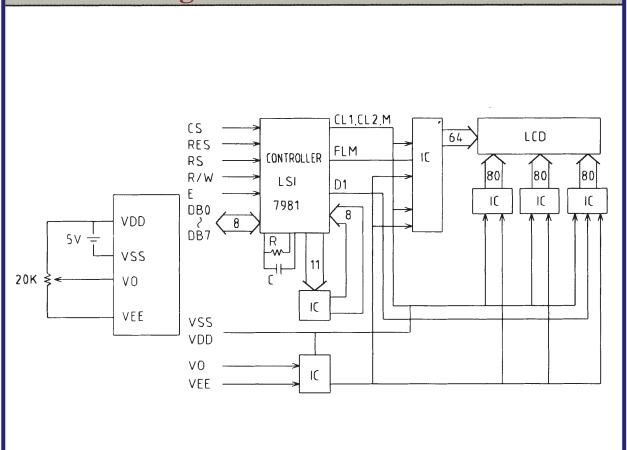
Electrical Characteristics

Item	Symbol	Condition	Specification	Unit
Logic circuit power supply Voltage	V_{DD}	--	4.75 \Rightarrow 5.25	V
	V_0	--	-5.0 \Rightarrow 20.0	
EL driver voltage	V_{EL}	$f_{EL}=500H_z$	90 \Rightarrow 110	V
High Level input voltage	V_{IH}	$V_{DD} = 5 \pm 0.25$	(0.7 \Rightarrow 1.0) x V_{DD}	V
Low Level input voltage	V_{IL}	$V_{DD} = 5 \pm 0.25$	(0 \Rightarrow 0.3) x V_{DD}	V
High Level output voltage	V_{OH}	$V_{DD} = 5 \pm 0.25$	2.4 \Rightarrow V_{DD}	V
Low Level output voltage	V_{OL}	$V_{DD} = 5 \pm 0.25$	0 \Rightarrow 0.4	V
Current consumption	I_{DD}	$V_{DD} = 5V$	15.0 MAX	mA
	I_{EE}	$V_{EE} = -10V$	2.0 MAX	
	I_{EL}	$V_{EL} = 110V$ $f_{EL} = 500H_z$	20.0(AC) MAX	

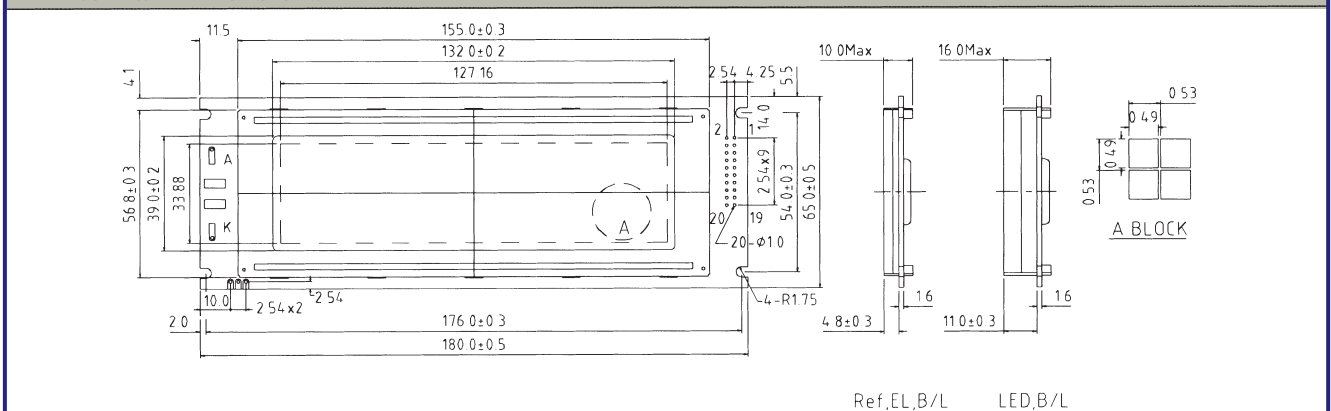
Pin Assignment

No.	Symbol	Level	Function
1.	V_{SS}		Ground
2.	V_{DD}		Power supply for logic circuit
3.	V_0		Power supply for LCD
4.	RS	H/L	H - Instruction L - Data
5.	R/W	H/L	H: Data read L: Data write
6.	E	H/L	Enable
7-14	DB0-DB7		Data bus line
15	CS		Chip enable active L
16	RES		Reset active L
17	V_{EE}		Negative voltage output(-10v)
18-20	NC		

Block Diagram



External Dimensions



Option

LCD Type								Backlight Type			Built-in Control LSI		
S1	S2	W	N	R	F	M	H	EL	LED	CCFL	Touch Panel	LC7981	
•	•	•	•	•	•	•	•	•	•	•			

Remarks: S1 : yellow-green STN LCD , S2 : gray STN LCD, W : black & white LCD, N : negative type LCD, R : reflective type LCD, F : transfective type LCD, M : transmissive type LCD, H : extended temperature type LCD (-20°C ~ 70°C)