

# DG series

## DG-16080 160 X 80 Dots

### Mechanical Data

Item	Standard Value	Unit
Module Size	100.0(W) x 54.0(H) x 11.3(T)	mm
Viewing Area	72.3(W) x 37.8(H)	mm
Dot Pixels	160 x 80	dots
Dot Size	0.39 x 0.39	mm
Dot Pitch	0.42 x 0.42	mm

### Absolute Maximum Ratings

Item	Symbol	Standard Value			Unit
		Min.	Typ.	Max.	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	0	--	7.0	V
Supply Voltage for LCD Drive	$V_{DD}-V_{EE}$	0	--	19.0	V
Input Voltage	$V_I$	$V_{SS}$	--	$V_{DD}$	V
Operation Temperature	$T_{opr}$	0	--	50	°C
Storage Temperature	$T_{stg}$	-20	--	70	°C

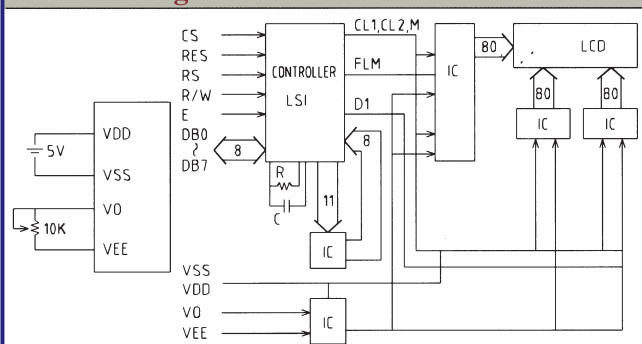
### Electrical Characteristics

Item	Symbol	Condition	Specification	Unit
LCD Supply Voltage	$V_{DD}$	--	4.75 $\Rightarrow$ 5.25	V
	$V_0$	--	-5.0 $\Rightarrow$ -20.0	V
EL Drives Voltage	$V_{EL}$	fEL=500Hz	90 $\Rightarrow$ 110	V
High Level Input Voltage	$V_{IH}$	$V_{DD}=5+0.25V$	(0.7 $\Rightarrow$ 1.0) x $V_{DD}$	V
Low Level Input Voltage	$V_{IL}$	$V_{DD}=5+0.25V$	(0 $\Rightarrow$ 0.3) x $V_{DD}$	V
High Level Output Voltage	$V_{OH}$	$V_{DD}=5+0.25V$	2.4 $\Rightarrow$ $V_{DD}$	V
Low Level Output Voltage	$V_{OL}$	$V_{DD}=5+0.25V$	0 $\Rightarrow$ 0.4	V
Current Consumption	$I_{DD}$	$V_{DD}=5V$	15.0Max.	mA
	$I_{EE}$	$V_{EE}=-10V$	4.0Max.	mA
	$I_{EL}$	$V_{EL}=110V$ fEL=500Hz	20.0(AC)Max.	mA

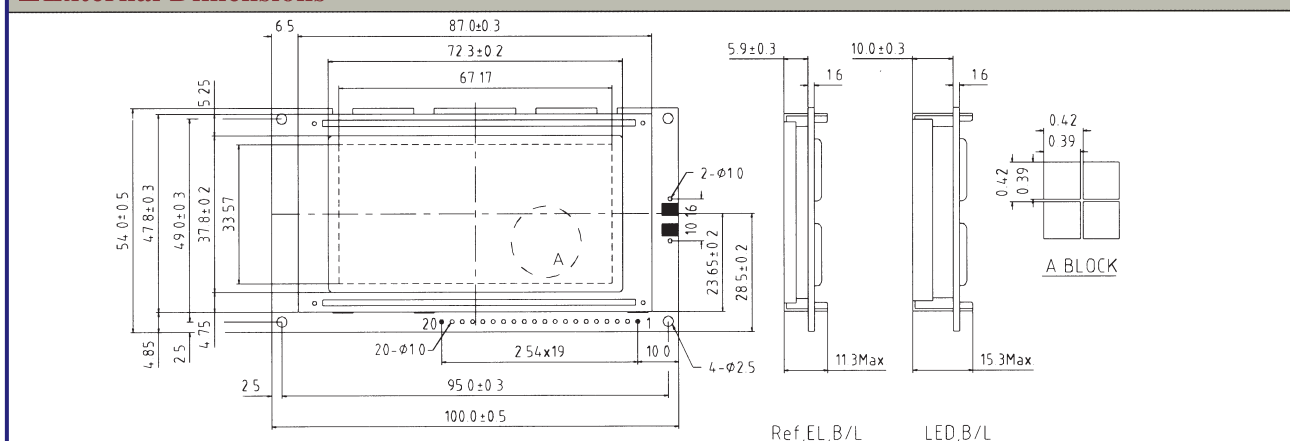
### Pin Assignment

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	H/L	Data Bus Line
15	CS	L	Chip Enable Active L
16	RES	L	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)