

# DG series

## DG-16160 160 X 160 Dots

### Mechanical Data

Item	Standard Value	Unit
Module Size	87.0(W) x 87.0(H) x 13.5(T)	mm
Viewing Area	62.0(W) x 62.0(H)	mm
Dot Pixels	160 x 160	dots
Dot Size	0.34 x 0.34	mm
Dot Pitch	0.38 x 0.38	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	--	26.0	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

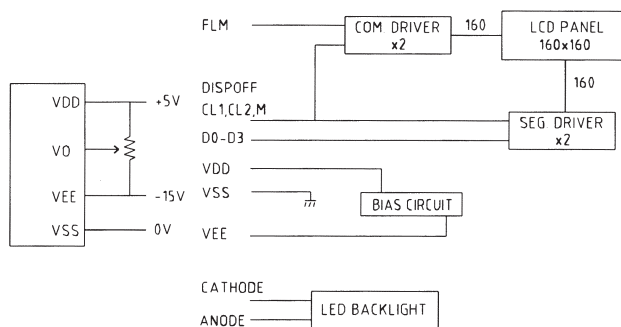
Item	Symbol	Condition	Standard Value			Unit
			Min.	Typ.	Max.	
LCD Supply Voltage	$V_{dd}-V_{ss}$	--	4.75	5.0	5.25	V
LCD Driver Circuit	$V_{dd}-V_{ss}$	-10 °C	20.6	22.1	23.6	V
Power Supply Voltage		25 °C	18.5	20.0	21.5	
		60 °C	15.7	17.2	18.7	
Input Voltage	$V_{IH}$	NOTE(1)	$0.7 \times V_{DD}$	--	$V_{DD}$	V
Input Voltage	$V_{IL}$	NOTE(1)	0	--	$0.3 \times V_{DD}$	V
Input Leakage Current	$I_U$					μA
Supply Current	$I_{DD}$	$V_{DD}=5.0V$	--	6.0	--	mA
	$I_{EE}$	$V_{EE}=-15.0V$	--	3.0	--	mA

Note (1) Pin, RES, E1,E2,R/W, P0-P7,A0

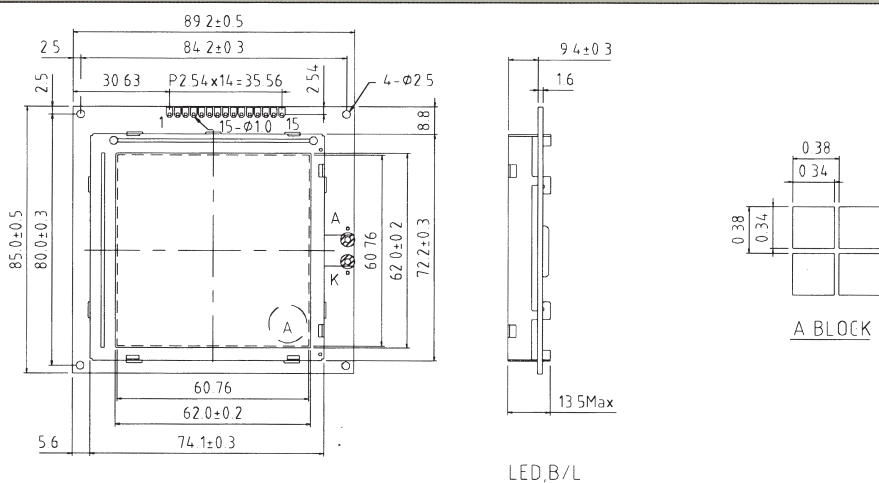
### Pin Assignment

No.	Symbol	Level	Function
1	$V_{SS}$		Ground
2	M		Control Signal for AC Driving
3	FLM		The FLM Signal Indicates, The Beginning of Each Display Cycle
4	CL1		The CL1 Latch, The Serial Data in Shift Register
5	CL2		Clock Signal for Shifting Serial Data
6~9	DB0~DB3		Serial Row Data
10	$V_{EE}(-18V)$		Power Supply for LCD Driving
11	$V_{DD}(+5V)$		Power Supply for Logic CRT
12	$V_0$		Operation Voltage for LCD Driving
13	DISPOFF		Display OFF when Low Level
14	CATHODE		Power for LED Backlight (-)
15	ANODE		Power for LED Backlight (+)

### 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		
•	•			•	•		•		•			--	