

# DG series

## DG-32240 320 X 240 Dots

### Mechanical Data

Item	Standard Value	Unit
Module Size	167.1(W) x 109.0(H) x 10.0 (T)	mm
Viewing Area	122.0(W) x 92.0 (H)	mm
Dot Pixels	320 x 240	dots
Dot Size	0.33 x 0.33	mm
Dot Pitch	0.36 x 0.36	mm

### Absolute Maximum Ratings

Item	Symbol	Standard Value			Unit
		Min.	Typ.	Max.	
Supply Voltage for Logic	$V_{dd}-V_{ss}$	0	--	6.5	V
Supply Voltage for LCD Drive	$V_{dd}-V_{ee}$	0	--	27.5	V
Input Voltage	$V_I$	$V_{SS}$		$V_{DD}$	V
Operation Temperature	$T_{opr}$	0		50	°C
Storage Temperature	$T_{stg}$	-20		70	°C

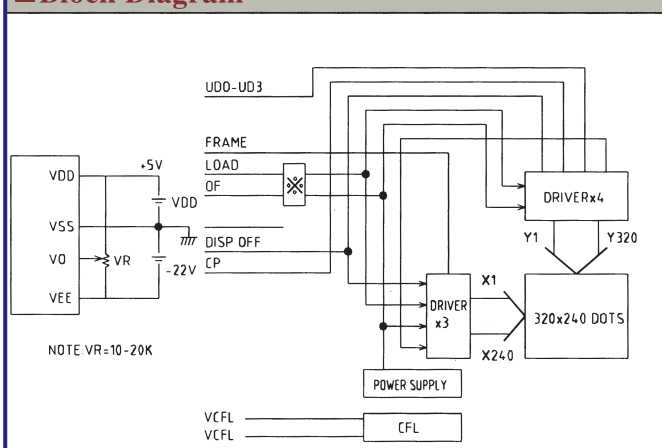
### Electrical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			Min.	Typ.	Max.	
LCD Supply Voltage	$V_{dd}-V_{ss}$	25°C	4.5	5.0	5.5	V
LCD Driver Circuit Power Supply Voltage	$V_{dd}-V_{ee}$	25°C	20.0	21.8	23.0	V
Input Voltage	$V_{IH}$	--	$0.7 \times V_{DD}$	--	$V_{DD}$	V
Input Voltage	$V_{IL}$	--	0	--	$0.7 \times V_{DD}$	V
Supply current for (Logic)	$I_{DD}$	$V_{DD} = 5V$ $V_{EE} = 22.0V$	--	7.0	--	mW
Supply current for (LCD)	$I_{EE}$	$V_{DD} = 5V$ $V_{EE} = 22.0V$	--	6.0	--	mA

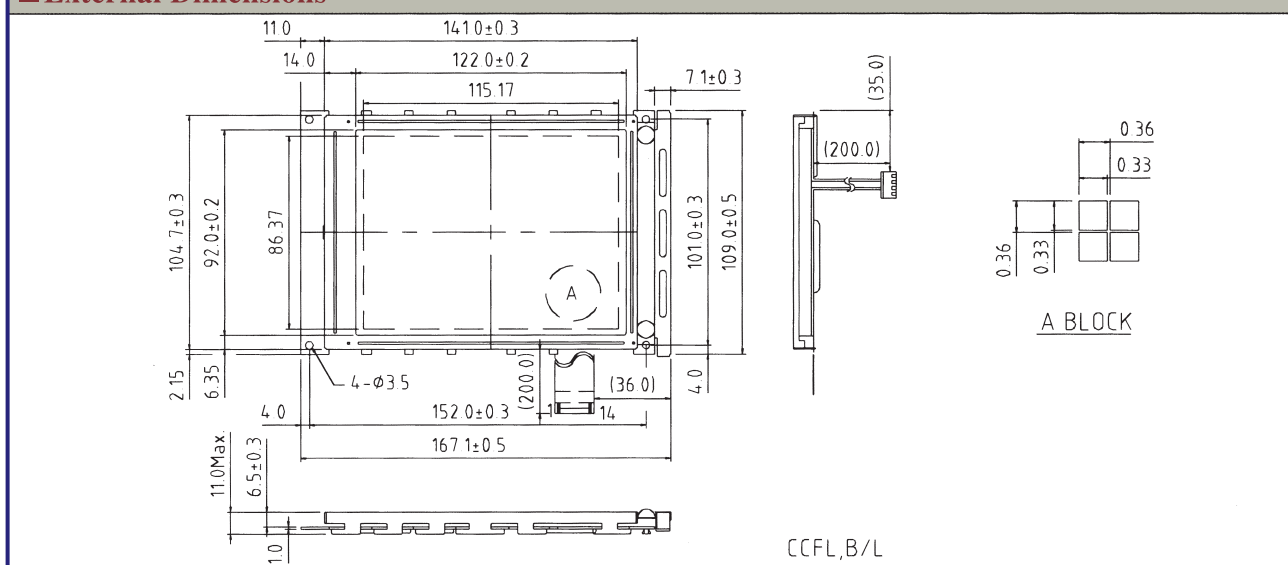
### Pin Assignment

No.	Symbol	Level	Function
1.	UD0	H/L	Display Data
2.	UD1		
3.	UD2		
4.	UD3		
5.	DISP OFF	H/L	H : ON L: OFF
6.	FRAME	H	First line market
7.	NC	--	
8.	LOAD	H→L	Data latch
9.	CP	H→L	Data shift
10.	$V_{DD}$	--	Power supply for logic
11.	$V_{SS}$	--	GND
12.	$V_{EE}$	--	Power supply for LCD
13.	$V_0$	--	Operating voltage LCD driving
14.	FGRD	--	Front panel ground

### 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		
•	•	•	•	•	•	•	•	•		•	•	--	