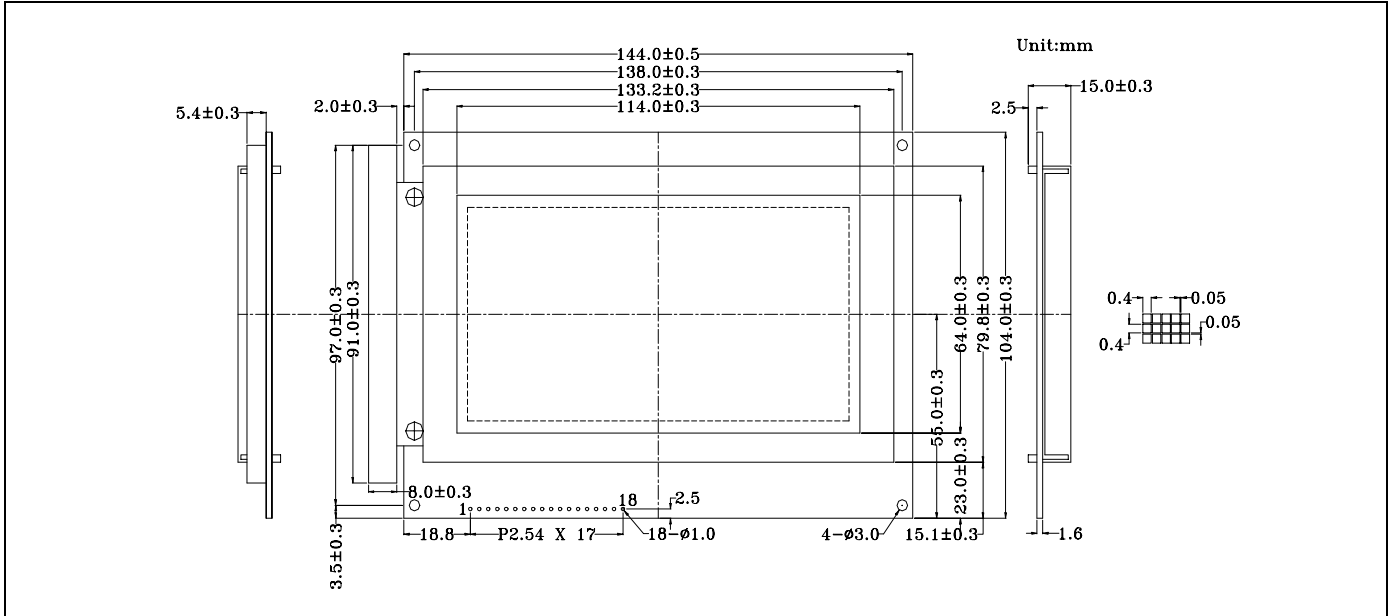




# JM240128A-CCFL

240DOTS×128DOTS  
1/128 DUTY,1/12 BIAS

## 1 EXTERNAL DIMENSION



## 2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size (W×H×T)	154.0×104.0×15.0	mm
Viewing Area (W×H)	114.0×64.0	mm
Number of Dots(W×H)	240×128	dots
Dot Pitch (W×H)	0.45×0.45	mm
Dot Size(W×H)	0.4×0.4	mm

## 5 ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Supply Voltage	Vdd	0.3	7.0	V
LCD Supply Voltage	Vee	Vdd-28	Vdd-8	V
Input Voltage	Vr	-0.3	Vdd+0.3	V
Operating Temperature	Top	0	50	°C
Storage Temperature	Tstg	-20	70	°C

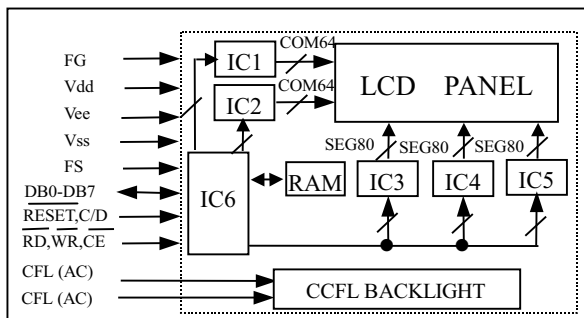
## 3 PIN CONNECTIONS

PIN	SYMBOL	SIGNAL DESCRIPTION
1	FG	Frame GND
2	Vss	GND
3	Vdd	Power Supply
4	Vdd	Power Supply for LCD
5	WR	Write when "L"
6	RD	Read when "L"
7	CE	Enable when "L"
8		Register Select(L=DATA,H=Instruction)
9	RESET	Reset Signal when "L"
10 to 17	DB0-DB7	Data Bus for 8bit Mode
18	FS	Select character style 6X8 or 8X8

## 6 ELECTRICAL CHARACTERISTICS(Ta=25°C)

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage(logic)	Vdd-Vss	-	4.5	5.0	5.5	V
Supply Current(logic)	Idd	Vdd=5.0	-	9.5	-	mA
Driving Current(LCD)	Iee	Vee=-14.0	-	4.6	-	mA
Driving Voltage(LCD)	Vdd-Vee	25°C	-	19	-	V
Input Voltage "H"	V <sub>IH</sub>	H	Vdd-2.2	-	Vdd	V
Input Voltage "L"	V <sub>IL</sub>	L	0	-	0.8	V
Output Voltage "H"	V <sub>OH</sub>	H	Vdd-0.3	-	Vdd	V
Output Voltage "L"	V <sub>OL</sub>	L	0	-	0.3	V

## 4 BLOCK DIAGRAM



## 7 CCFL BACKLIGHT CHARACTERS(Ta=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Inverter Input Voltage	V <sub>i</sub>	-	0	5	12	V(DC)
CCFL operating voltage	V <sub>CCFL</sub>	-	200	-	800	V(AC)
CCFL operating current	I <sub>f</sub>	-	-	5	-	mA
CCFL power consumption	P <sub>d</sub>	-	1.0	-	4.2	W