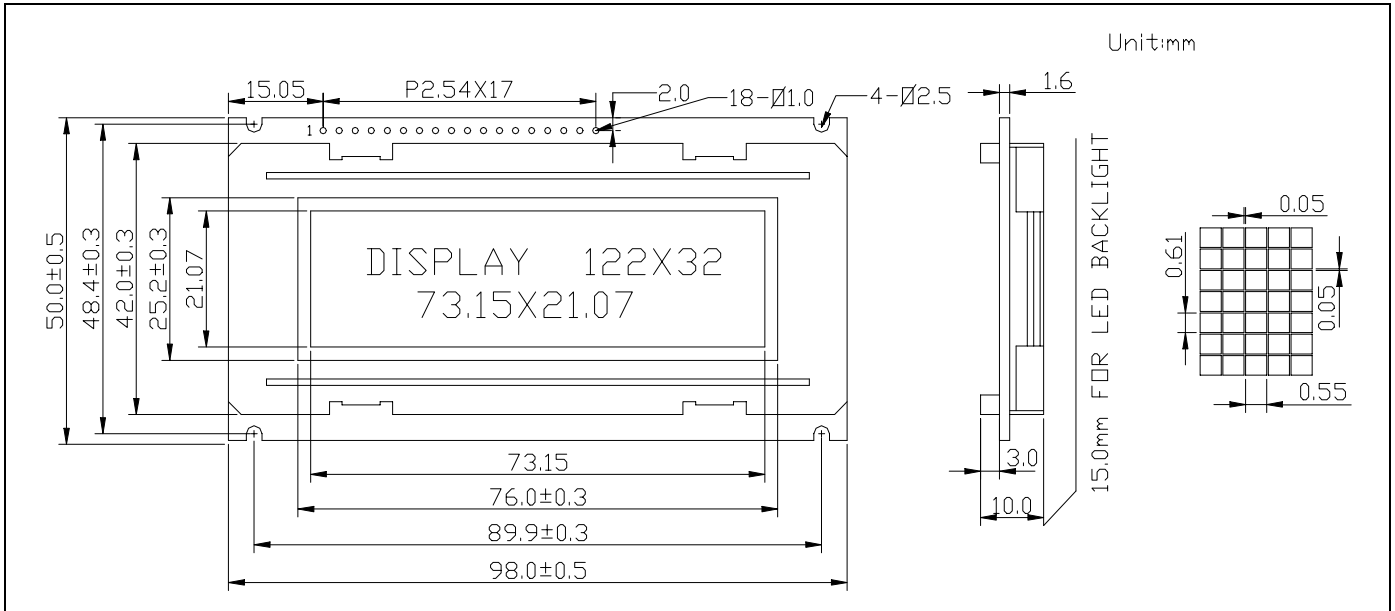




JM12232A

122DOTS×32DOTS
1/32 DUTY,1/7 BIAS

1 EXTERNAL DIMENSION



2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size (W×H×T)	98.0×50.0×10.0(LED:15.0)	mm
Viewing Area (W×H)	76.0×25.2	mm
Number of Dots(W×H)	122×32	dots
Dot Pitch (W×H)	0.60×0.66	mm
Dot Size(W×H)	0.55×0.61	mm

5 ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Supply Voltage	V _{dd}	-0.3	7	V
LCD Supply Voltage	V _{ee}	V _{dd} -13.5	0	V
Input Voltage	V _r	-0.3	V _{dd} +0.3	V
Operating Temperature	Top	0	50	°C
Storage Temperature	T _{stg}	-20	70	°C

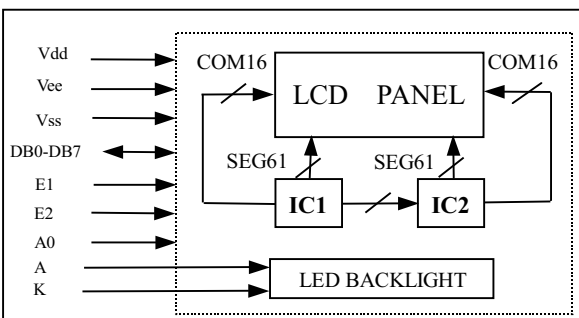
3 PIN CONNECTIONS

PIN	SYMBOL	SIGNAL DESCRIPTION
1	V _{ss}	GND
2	V _{dd}	Power Supply
3	V _{ee}	Power Supply for LCD
4	A0	H=Display data, L=Instruction
5	R/W	Read/Write Read when "H", Write when "L"
6	E1	Enable for IC1
7	E2	Enable for IC2
8	NC	No connection
9to16	DB0 to DB7	Data Bus for 8bit Mode
17	A	Anode of LED Unit
18	K	Cathode of LED Unit

6 ELECTRICAL CHARACTERISTICS(T_a=25°C)

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage(logic)	V _{dd} -V _{ss}	-	4.5	5.0	5.5	V
Supply Current(logic)	I _{dd}	V _{dd} =5.0	-	1.47	-	mA
Driving Current(LCD)	I _{ee}	V _{ee} =-4.2	-	1.46	-	mA
Driving Voltage(LCD)	V _{dd} -V _{ee}	-	-	9.2	-	V
Input Voltage "H"	V _{IH}	H	0.8V _{dd}	-	V _{dd}	V
Input Voltage "L"	V _{IL}	L	V _{ss}	-	0.8	V
Output Voltage "H"	V _{OH}	H	2.4	-	-	V
Output Voltage "L"	V _{OL}	L	-	-	0.4	V

4 BLOCK DIAGRAM



7 BOTTOM BACKLIGHT CHARACTERS(T_a=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage	V _{LED}	-	-	4.1	-	V
LED Forward Consumption Current	I _f	T _a =25°C V _f =4.1V	-	210	-	mA
LED Allowable Dissipation	P _d	-	-	880	-	mW