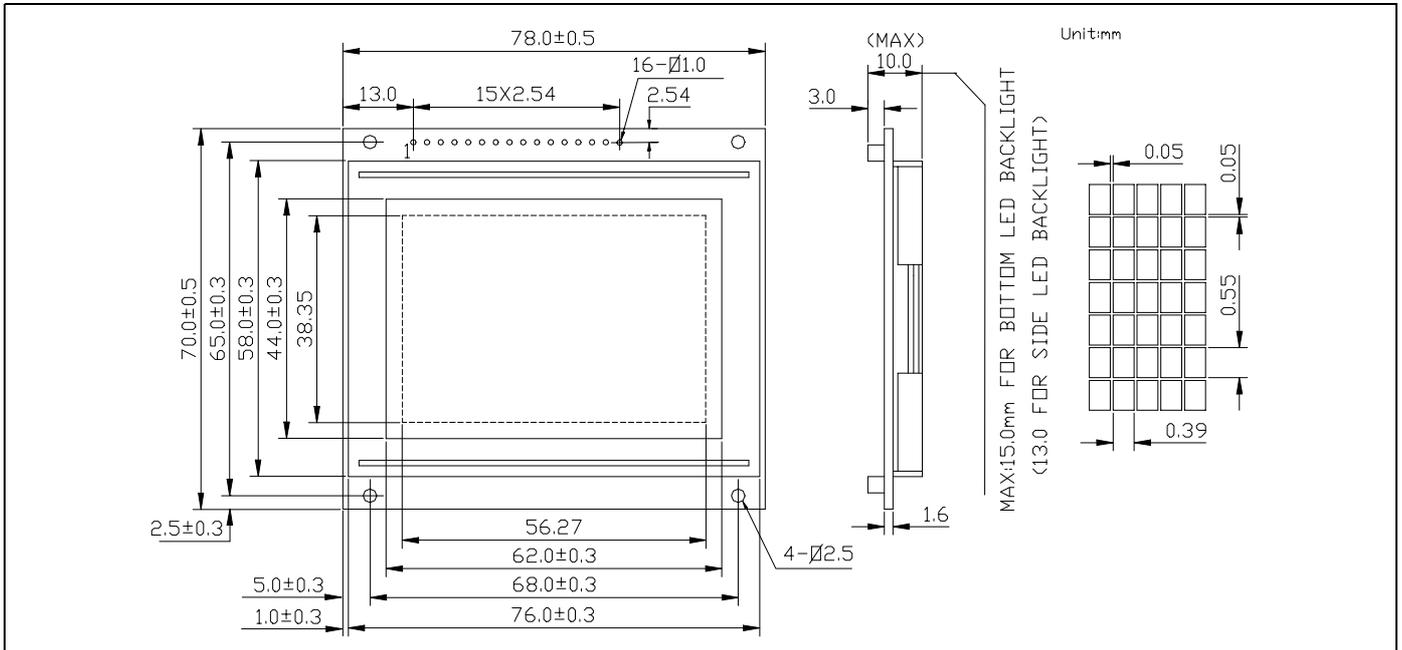




JM12864A

128DOTS×64DOTS
1/64 DUTY,1/9 BIAS

1 EXTERNAL DIMENSION



2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size (W×H×T)	78.0×70.0×10.0(LED:15.0)	mm
Viewing Area (W×H)	62.0×44.0	mm
Number of Dots(W×H)	128×64	dots
Dot Pitch (W×H)	0.44×0.60	mm
Dot Size(W×H)	0.39×0.55	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} -19.0	V _{dd} +0.3	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

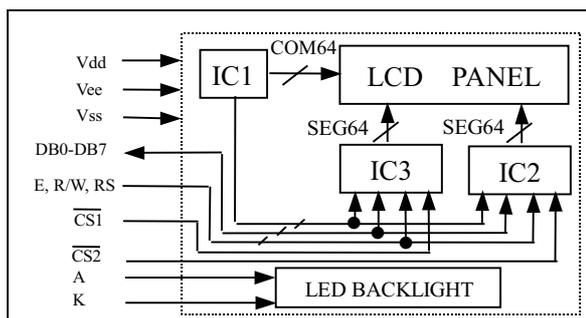
3 PIN CONNECTIONS

PIN	SYMBOL	SIGNAL DESCRIPTION
1	CS1	Chip Select Signal For IC3 When L
2	CS2	Chip Select Signal For IC2 When L
3	V _{ss}	GND
4	V _{dd}	Power Supply: +5V
5	V _{ee}	Power Supply For LCD
6	RS	Register Select(H=DATA, L=Instruction)
7	R/W	Read/Write L=MPU to LCM, H=LCM to MPU
8	E	Enable
9 to 16	DB0 to DB7	Data Bus for 8bits Mode

6 ELECTRICAL CHARACTERISTICS(Ta=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	-	4.0	-	mA
Driving Current(LCD)	I _{ee}	V _{ee} =-7.8	-	2.8	-	mA
Driving Voltage(LCD)	V _{dd} -V _{ee}	25°C	-	12.8	-	V
Input Voltage "H"	V _{IH}	H	0.7V _{dd}	-	V _{dd}	V
Input Voltage "L"	V _{IL}	L	0	-	0.8	V
Output Voltage "H"	V _{OH}	H	V _{dd} -0.4	-	-	V
Output Voltage "L"	V _{OL}	L	-	-	0.4	V

4 BLOCK DIAGRAM



7 BACKLIGHT CHARACTERS(Ta=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage	V _{LED}	-	-	4.1	-	V
LED Forward Consumption Current	I _{f(Side)}	Ta=25°C V _f =4.1V	-	83	-	mA
	I _{f(Bottom)}		-	192	-	
LED Allowable Dissipation	P _{d(Side)}	-	-	350	-	mW
	P _{d(Bottom)}		-	790	-	