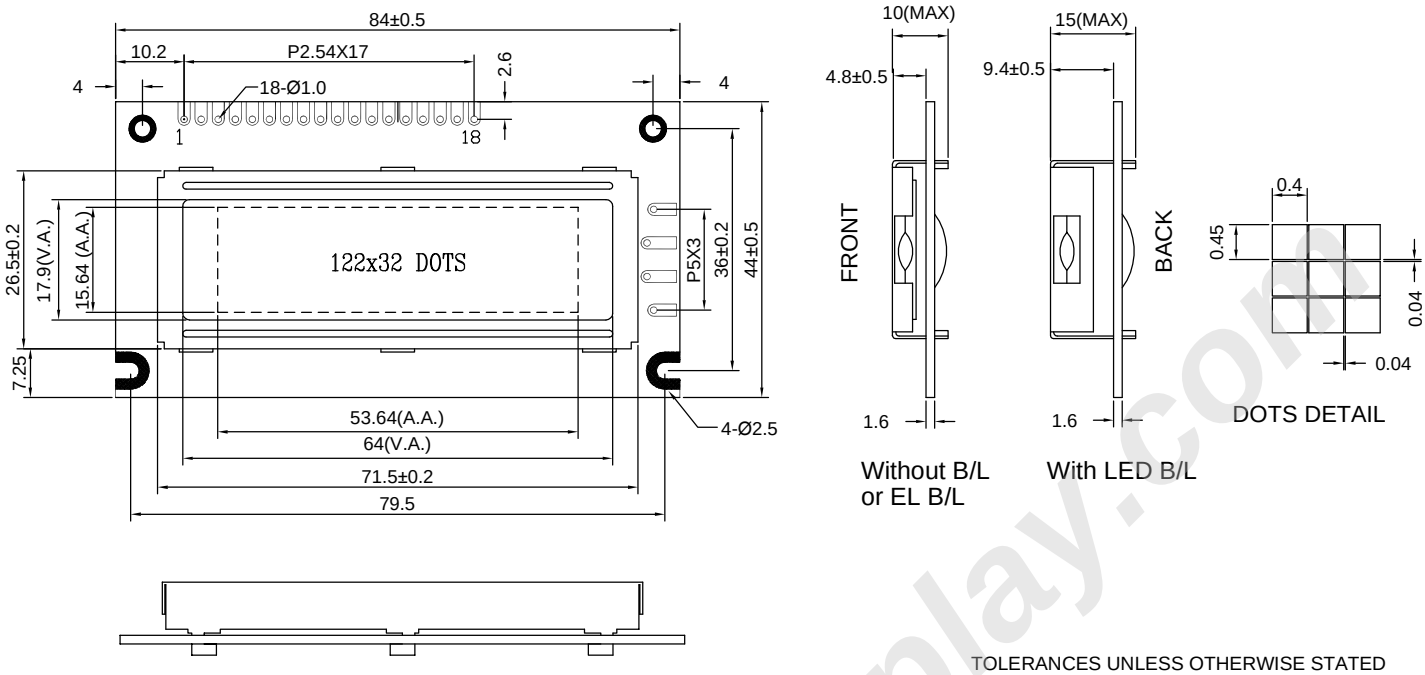
E-SHINE DISPLAY CO., LTD. EG12232A

Dimension Drawing



TOLERANCES UNLESS OTHERWISE STATED
X.X ±0.20 X.XX ±0.10 UNIT: mm

Feature:

1. 122 x 32 dots graphic display
2. Built-in controller(SBN1661G or equivalent)
3. +5V power supply(also available for +3.3V)
4. 1/32 Duty cycle
5. STN or FSTN Mode
6. Match all kind colors of LED back light
7. ROHS compliant

Mechanical Data

Item	Standard	Unit
Module dimension	84.0 x 44.0	mm
Viewing area	64.0 x 17.9	mm
Mounting hole	79.5 x 36.0	mm
Dots size	0.40 x 0.45	mm

Interface Pin Connections

PIN NO.	Symbol	Function
1	VSS	GND
2	VDD	+5V or +3.3V
3	V0	Contrast adjustment
4	REST	H ⟶ L Rest the LCM
5	E1	Enable signal
6	E2	Enable signal
7	R/W	H :Read data L :Write data
8	A0	H ⟶ Data L ⟶ Instruction
9	DB0	H/L Data bus line
10	DB1	H/L Data bus line
11	DB2	H/L Data bus line
12	DB3	H/L Data bus line
13	DB4	H/L Data bus line
14	DB5	H/L Data bus line
15	DB6	H/L Data bus line
16	DB7	H/L Data bus line
17	A	Power supply for B/L(LED+)
18	K	Power supply for B/L(LED-)

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ		
Power supply	VDD-VSS	-0.3	---	7.0	V
Input voltage	VI	-0.3	---	VDD	

Electronical Characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Input voltage	VDD	+5.0V	4.5	5.0	5.5	V
		+3.3V	2.7	3.3	4.5	V
Supply current	I_{DD}	VDD=5V	----	0.6	0.8	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0 (VDD=5V)	-20°C	4.9	5.2	5.5	V
		0°C	4.5	4.8	5.1	
		25°C	4.1	4.5	4.8	
		50°C	3.8	4.1	4.4	
		70°C	3.5	3.8	4.1	
LED forward voltage	VF	25°C	----	4.2	4.6	V
LED forward current	IF	25°C Array	----	120	----	mA
		25°C Edge	----	15	20	
EL power supply	I_{EL}	V_{EL}=110V AC 400Hz	----	----	5.0	mA