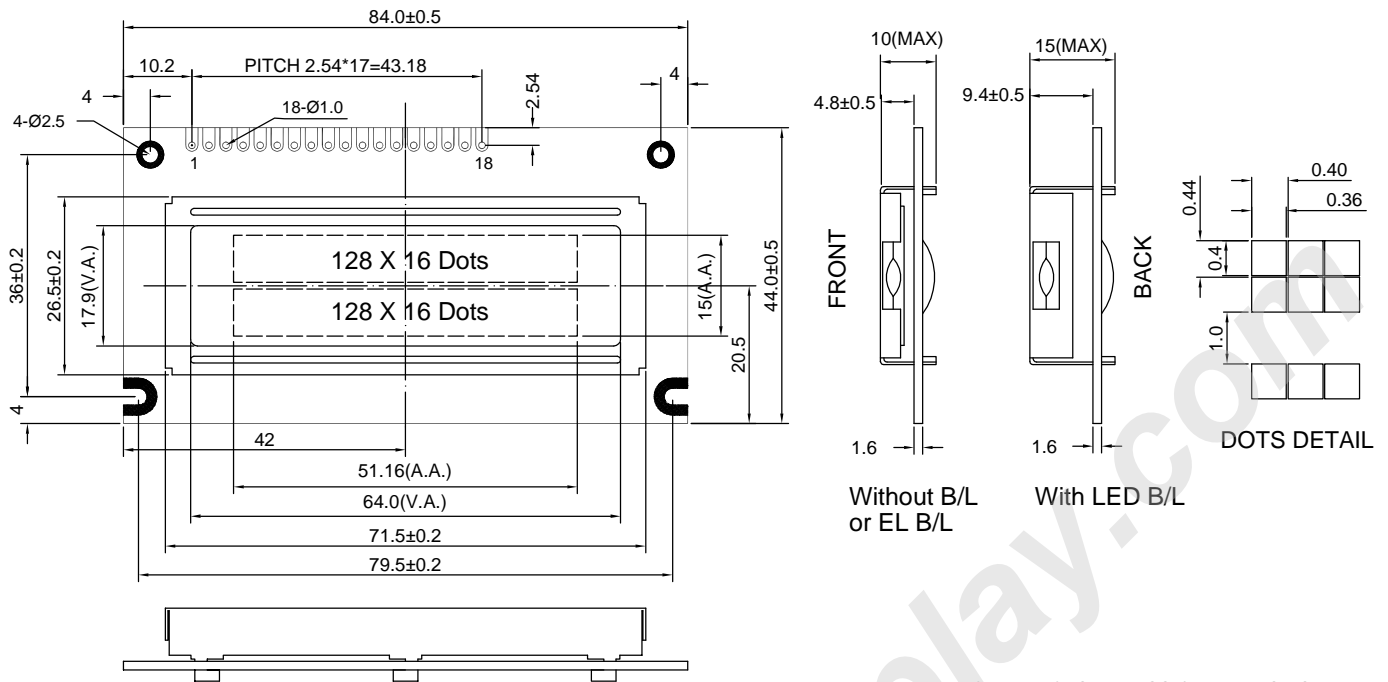


Dimension Drawing



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

Feature:

1. 128 x 32 dots graphic display
2. Built-in controller(ST7920 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. Supporting 8192 Chinese fonts(16x16 dots)
8. ROHS compliant

Interface Pin Connections

PIN NO.	Symbol	Function
1	VSS	GND
2	VDD	+5V or +3.3V
3	V0	Contrast adjustment
4	RS	H/L Register select signal
5	R/W	H/L Read/Write signal
6	E	H/L Enable signal
7	DB0	H/L Data bus line
8	DB1	H/L Data bus line
9	DB2	H/L Data bus line
10	DB3	H/L Data bus line
11	DB4	H/L Data bus line
12	DB5	H/L Data bus line
13	DB6	H/L Data bus line
14	DB7	H/L Data bus line
15	REST	Reset signal
16	VOUT	Double voltage output for LCD
17	A	Power supply for B/L(LED+)
18	K	Power supply for B/L(LED-)

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

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Power supply	VDD-VSS	-0.3	---	5.5	V
Input voltage	VI	-0.3	---	VDD+0.3V	

Electrical 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	
Supply current	I _{DD}	VDD=5V	---	0.45	0.75	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0 (VDD=5V)	-20 °C	4.9	5.2	5.5	
		0 °C	4.5	4.8	5.1	
		25 °C	4.1	4.5	4.8	
		50 °C	4.0	4.3	4.5	
LED forward voltage	V _F	25 °C	---	3.0	3.3	V
LED forward current	I _F	25 °C	Array	---	120	
			Edge	---	15	20
EL power supply	I _{EL}	V _{EL} =110V AC 400Hz	---	---	5.0	mA