

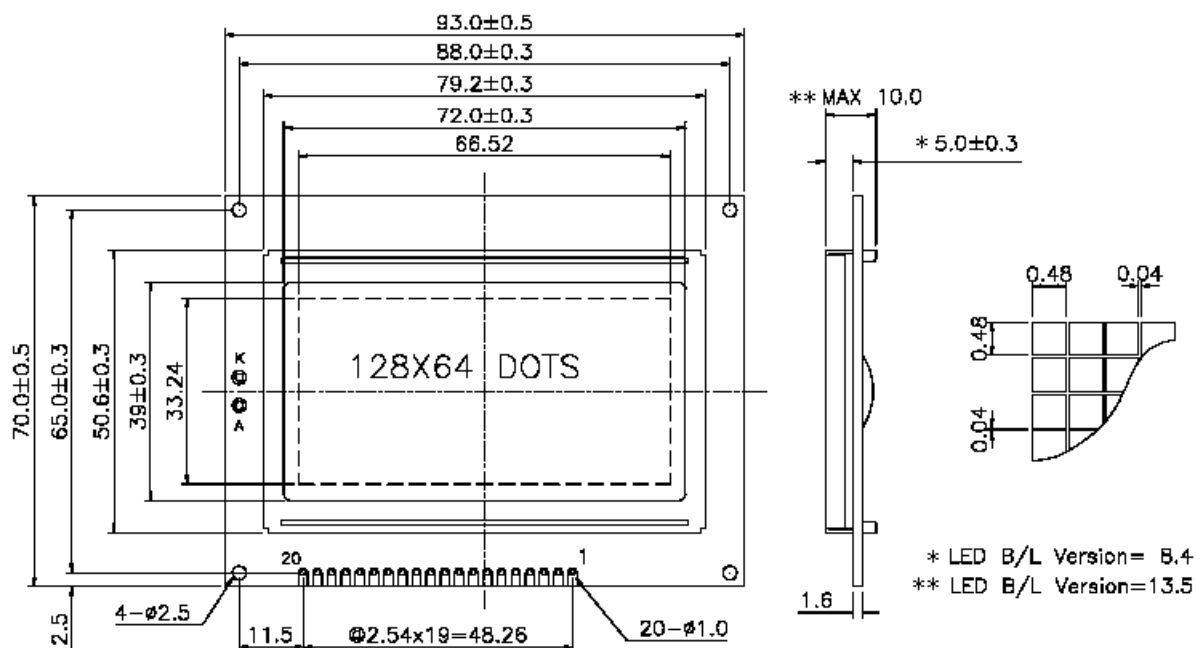


TG12864B

128X64 Dots
1/64 Duty, 1/9Bias

External Dimension

<http://www.oppod.com>



Mechanical Data

Item	Standard Value	Unit
Module size (W*H*T)	93.0*70.0*10.0/13.5	mm
View area (W*H)	72.0*39.0	mm
Active area (W*H)	66.52*33.24	mm
Dot size (W*H)	0.48*0.48	mm

Maximum Absolute Ratings

Item	Symbol	Value	Unit
Supply logic Volt.	$V_{DD} - V_{SS}$	-0.3 ~ +7.0	V
LCD driving Volt.	$V_{DD} - V_0$	-0.3 ~ 19.0	V
Input Volt.	V_{in}	-0.3 ~ $V_{DD} + 0.3$	V
Operating temp.	T_{OPR}	-20 ~ +70	
Storage temp.	T_{STG}	-30 ~ +80	

Electrical Characteristics ($V_{DD} = 4.5V \sim 5.5V$)

Item	Symbol	Condition	Value	Unit
Supply logic Volt.	V_{DD}	---	5.0 ± 0.5	V
Operating current	I_{DD}	$V_{DD} = 5.0V$	6.0 ~ 8.0	mA
Input high volt.	V_{IH}	---	$2.0 \sim V_{DD}$	V
Input low volt.	V_{IL}	---	$-0.3 \sim 0.8$	V
Output high volt.	V_{OH}	$I_{OH} = -0.2mA$	$2.4 \sim V_{DD}$	V
Output low volt.	V_{OL}	$I_{OL} = 1.6mA$	$0 \sim 0.4$	V
LCD driving volt.	V_{LCD}	$T_A = 25$	8.0 (Type)	V

LED Backlight Characteristics ($T_A = 25$)

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Volt.	V_f	---	---	4.1	4.3	V
Led Current	I_f	$T_A = 25$	---	300	---	mA
Power Dissipation	P_d	---	---	1250	---	mW

Interface Description

PIN	Symbol	Level	Description
1	V_{SS}	0V	Ground
2	V_{DD}	5.0V	Power supply for logic
3	V_0	Variable	Driving voltage for LCD
4	RS	H/L	H:Data L:Instruction
5	RW	H/L	H:Read L:Write
6	E	H/L	Enable
7-14	DB0 ----- DB7	H/L	Data bus
15	CS1	H	Selection for IC1, active High
16	CS2	H	Selection for IC2, active High
17	/RST	L	Reset signal, active low
18	VEE	-5V	Negative voltage
19	A	+5V	Anode of LED Backlight
20	K	0V	Cathode of LED Backlight

Block Diagram

