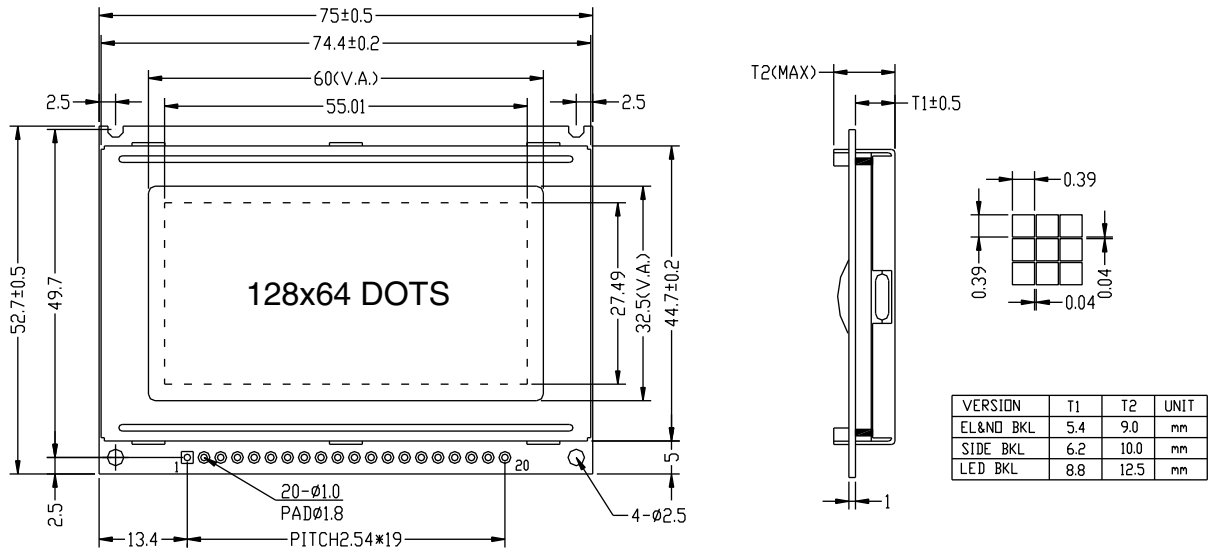
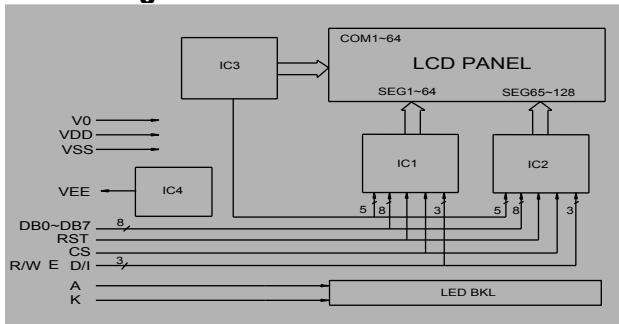


Outline Dimension



Block diagram



Feature

1. 128X64 dots graphic LCD module
2. Built-in controller (KS0108B)
3. 5.0V power supply
4. STN; 1/64 duty; LED B/L or EL B/L

Mechanical Data

Item	Standard	Unit
Module dimension	75.0x52.7	mm
Viewing area	60.0x32.5	mm
Dot size	0.39x0.39	mm
Dot pitch	0.43x0.43	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	

Electronical characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Input voltage	VDD	+5V	4.7	5.0	5.5	V
Supply current	I _{DD}	VDD=5V	-----	8	-----	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0	-20°C	-----	-----	-----	V
		0 °C	-----	9.8	-----	
		25°C	-----	9.5	-----	
		50°C	-----	9.3	-----	
LED forward voltage	V _F	25°C	-----	4.2	4.5	V
LED forward current	I _F	25°C	-----	240	-----	mA
EL power supply current	I _{EL}	V _{EL} =110V AC 400Hz	-----	-----	-----	mA

Interface pin connections

PIN NO	Symbol	Function
1	VDD □	+5V
2	VSS □	GND
3	V0 □	Constrast adjustment
4 to 11	DB0 to DB7	H/L Data bus line
12	CS1	Chip select for IC1
13	CS2	Chip select for IC2
14	RST	Reset signal
15	R/W	H/L Read/Write signal
16	D/I	H/L H: Data,L:Instruction code
17	E	H/L Enable signal
18	VEE	Negative voltage output
19	A	Power supply for BKL(4.2V)
20	K	Power supply for B/L(GND)