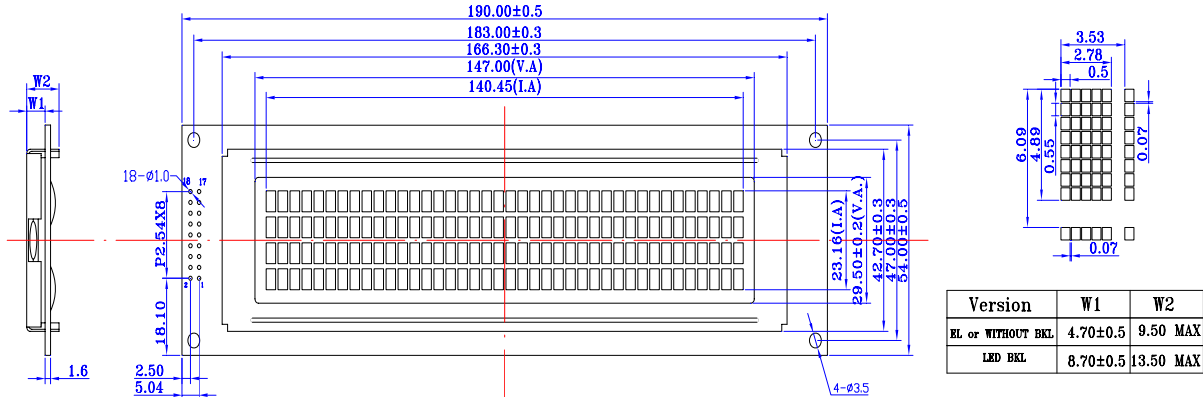
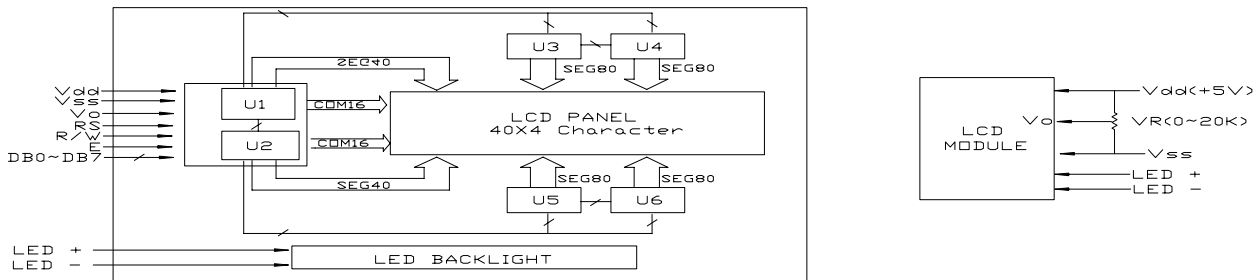


◆ **OUTLINE DIMENSION**



◆ **BLOCK DIAGRAM & POWER SUPPLY**



◆ **MECHANICAL SPEC. & FEATURES**

Item	Dimension(mm)	Features	
Module Size(W×H×T)	190.0×54.0×9.5/13.5	LC Fluid	STN (Yellow-green, Gray, Blue), FSTN
Viewing Area(W×H)	147.0×29.5	Polarizer	Reflective, Transflective, Transmissive
Dot Size(W×H)	0.50×0.55	View Angle	6:00 o'clock or 12:00 o'clock
Dot Pitch(W×H)	0.57×0.62	Display Type	Positive or Negative
Character Size(W×H)	2.78×4.89	Backlight	LED (Optional)
Character Pitch(W×H)	3.53×6.09	Operating Temp.	0°C~50°C or -20°C~70°C
		Controller	S6A0069 or Equivalent

◆ **INTERFACE PIN CONNECTIONS**

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	Vss	Ground for logic	7	E2	E2 Enable signal
2	Vdd	Power supply for logic	8~15	DB0~DB7	Data bus lines
3	V0	Power supply for LCD	16	VEE	Negative voltage output
4	RS	Register selection (H:Data, L:Instruction)	17	A	BKL +
5	R/W	Read/Write selection (H: R, L: W)	18	K	BKL -
6	E1	E1 Enable signal			

◆ **ELECTRICAL CHARACTERISTICS**

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Operating Voltage	Vdd	Ta=25°C	---	5.0	---	V
Operating Voltage for LCD	Vlcd	Ta=25°C	---	4.5	---	V
Supply Current	Idd	Ta=25°C, Vdd=5.0V	---	3.5	5.0	mA
Supply Voltage for LED	Vf	Ta=25°C, R=6.8Ω	---	4.2	---	V
Supply Current for LED	If	Ta=25°C, Vf=4.2V	---	340	---	mA