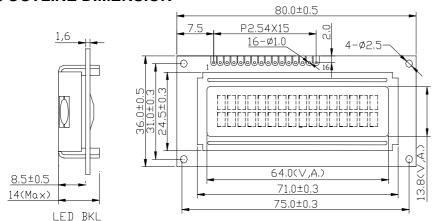
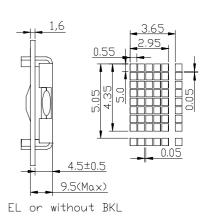
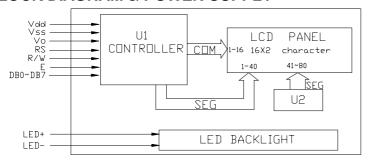
# **LCD MODULE VSTM-1602A**

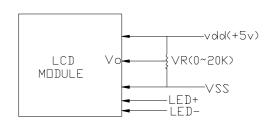
## **OUTLINE DIMENSION**





## **BLOCK DIAGRAM & POWER SUPPLY**





## **● MECHANICAL SPEC.&FEATURES**

Item	Dimension(mm)		
Module Size(W×H×T)	80.0×36.0×9.5/14.0		
Viewing Area(WxH)	64.0×13.8		
Dot Size(W×H)	0.55×0.50		
Dot Pitch(W×H)	0.60×0.55		
Character Size (W×H)	2.95×4.35		
Character Pitch(W×H)	3.65×5.05		

Features			
LC Fluid	TN,STN(Yellow-green,Gray,Blue),FSTN		
Polarizer	Reflective, Transflective, Transmissive		
View Angle	6:00 o'clock or 12:00 o'clock		
Display Type	Positive or Negative		
Backlight	LED(Optional)		
Operating Temp.	0°C ~50°C or -20°C ~70°C		
Controller	S6A0069 or Equivalent		

## **•INTERFACE PIN CONNECTIONS**

Pin No.	Symbol	Function
1	Vss	Ground for logic
2	Vdd	Power supply for logic
3	Vo	Power supply for LCD
4	RS	Register selection(H:Data,L:Instruction)
5	R/W	Read/Write selection(H:R,L:W)

Pin No.	Symbol	Function
6	Е	Enable signal
<b>7</b> ∼14	DB0∼DB7	Data bus lines
15	Α	BKL+
16	K	BKL-

## • ELECTRICAL CHARACTERISTICS

ltem	Symbol	Test Condition	Min	Тур.	Max.	Unit		
Operating Voltage	Vdd	Ta=25℃		5.0		V		
Operating Voltage for LCD	Vlcd	Ta=25℃		4.5		V		
Supply Current	ldd	Ta=25℃,Vdd=5.0V		2.0	3.0	mA		
Supply Voltage for LED	Vf	Ta=25℃,R=6.8Ω		4.2		V		
Supply Current for LED	If	Ta=25°C,Vf=4.2V		190		mA		