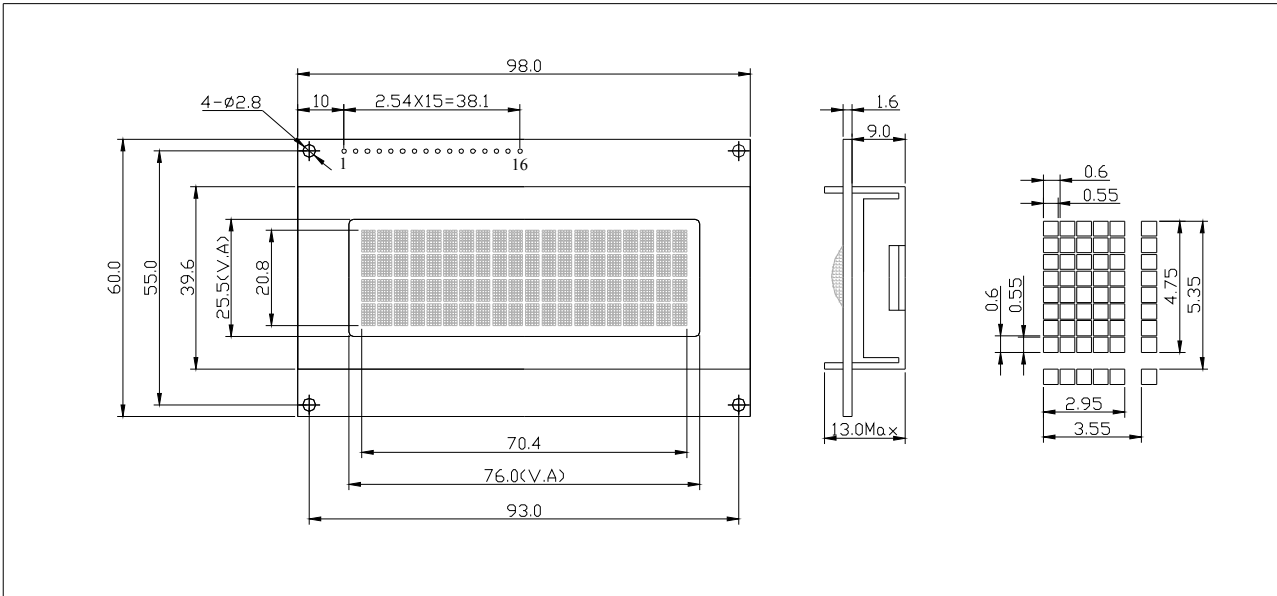


HTM2004A

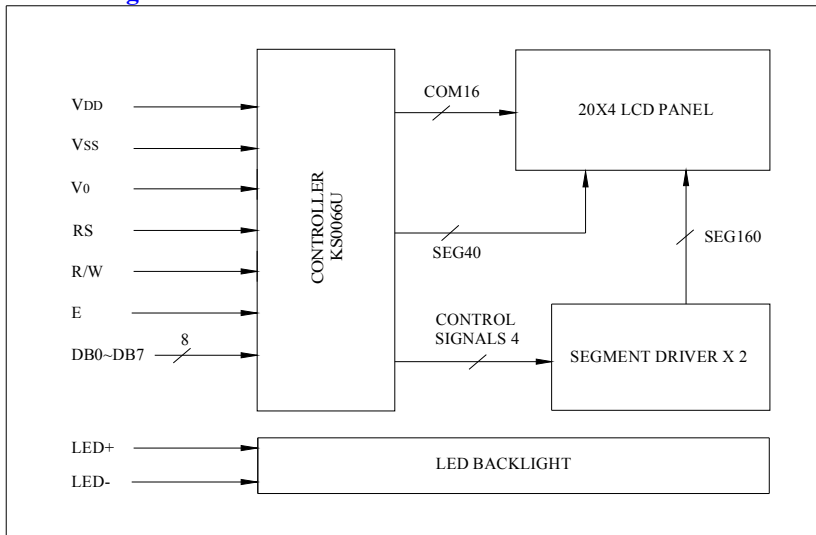
- * 20 Character x 4 Lines
- * View Angle (6 : 00 or 12 :00)
- * 1/16 Duty , 1/5 Bias
- * EL or LED Backlight(Yellow , Blue , White)

- * Reflective or Transflective or Transmissive
- * STN (Yellow or Gray or Blue)
- * Controller/Driver (KS0066U)
- * Operating Temp (- 20℃~70℃)

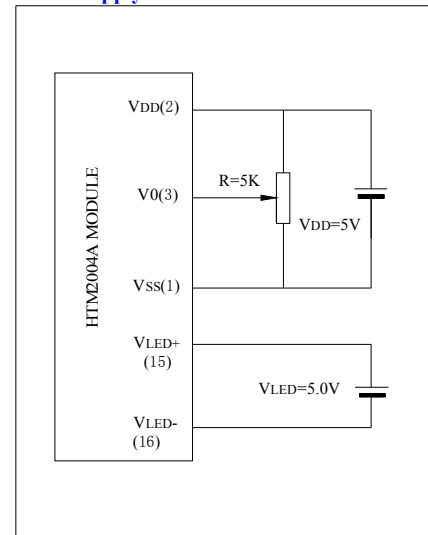
Outline Dimensions



Block Diagram



Power Supply



Mechanical Specifications Electrical Specifications

Item	Description(mm)	Item	Symbol	Min	Typ	Max	Unit
Size	98.0(L)x60.0(W)x13.0(H)	Supply Voltage for Logic	VDD	4.75	5.0	5.25	V
V.A	76.0(L)x25.5(W)	Supply Voltage for LCD	VLCD	4.5	4.8	5.0	V
Dot Pitch	0.60(L)x0.60(W)	Supply Current for Logic	IDD		1.5	3.0	mA
Dot Size	0.55(L)x0.55(W)	Supply Current for LED	IF			150	mA

Interface Signals

Pin	Symbol	Level	Description	Pin	Symbol	Level	Description
1	VSS	0V	GND	6	E	H,H→L	Enable Signal
2	VDD	+5V	Supply Voltage for logic	7~14	DB0~DB7	H/L	Data Bus
3	VO		Operating Voltage for LCD	15	A	+5.0V	LED+
4	RS	H/L	H: Data L: Instruction	16	K	0V	LED-
5	R/W	H/L	H: Read L: Write				