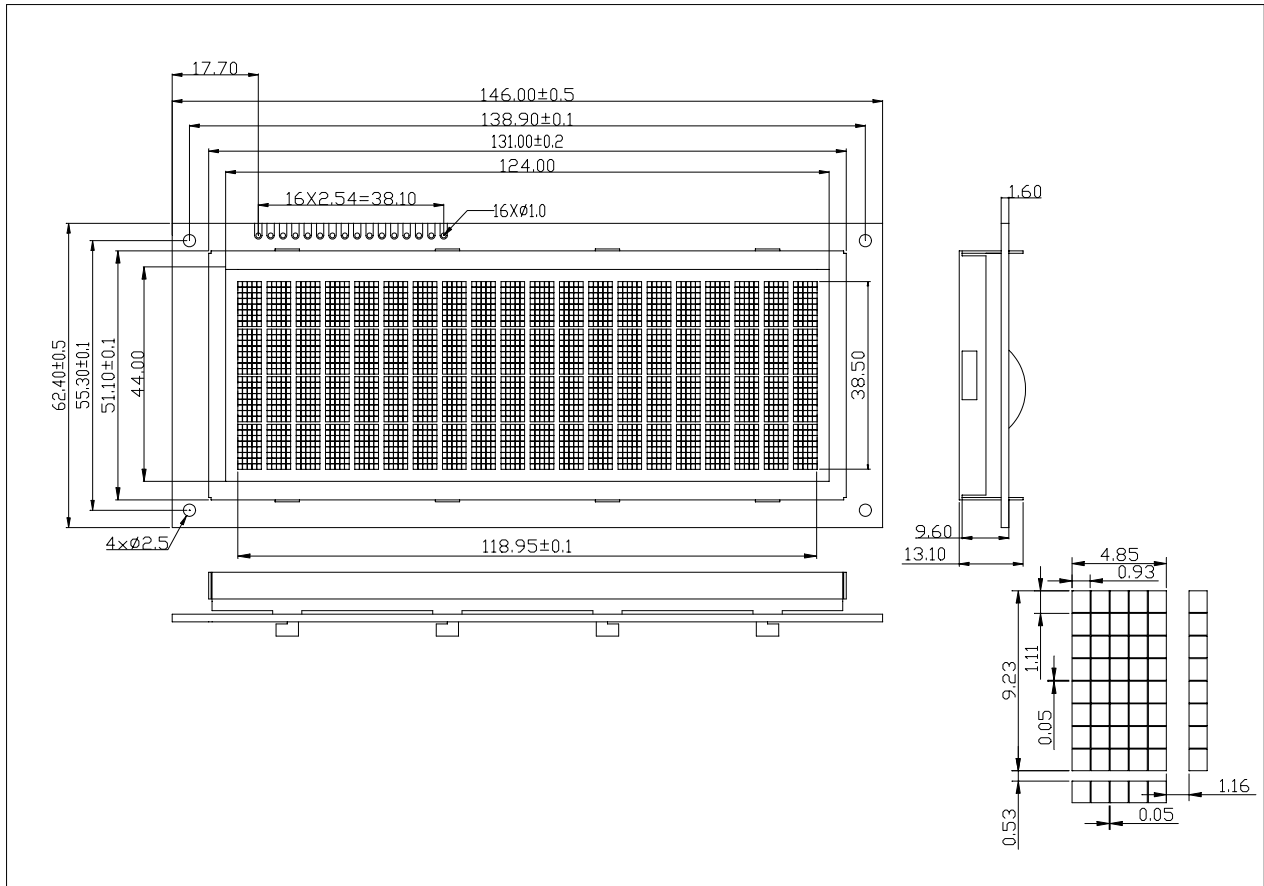


ATM2004F SERIES ----- STANDARD CHARACTER LCD MODULES

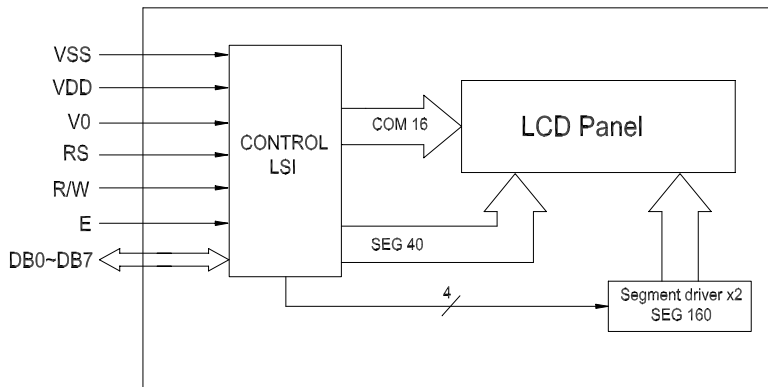
- * 5 x 8 with Cursor Dots
- * View Angle (6:00)
- * 1/16 Duty, 1/5 Bias, 20CHAR x 4LINE
- * LED Backlight (Yellow green)

- * Transflective
- * STN (Yellow green)
- * Controller/Driver (S6A0069)
- * Operating Temp (-20 ~70)

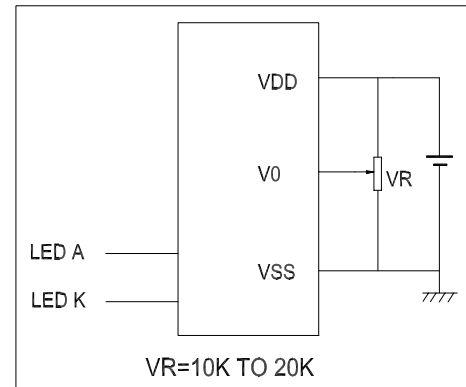
External Dimensions



Block Diagram



Power Supply



Mechanical Specifications

Electrical Specifications

Item	Description(mm)	Item	Symbol	Min	Typ	Max	Unit
Size	146(L)x62.4(W)x13.1(H)	Supply Voltage for Logic	VDD	4.5	5.0	5.5	V
V.A	124(L)x44(W)	Supply Voltage for LCD	VLCD	4.0	4.5	5.0	V
Character Pitch	6.01 x 9.76	Supply Current for Logic	IDD		1.0	2.0	mA
Dot Size	0.93*1.11	Supply Current for LED	IF			80	mA

Interface Signals---- J1

Pin	Symbol	Level	Description	Pin	Symbol	Level	Description
1	VSS	0V	Ground	7~14	DB0~DB7	H/L	Data Bus Line
2	VDD	+5V	Supply Voltage for Logic	15	A	--	Back Light anode:+4.2V
3	V0	--	Operating Voltage for LCD	16	K	--	Back Light cathode:0V
4	R/S	H/L	H: Data L: Instruction Code				
5	R/W	H/L	H: Data Read L: Data Write				
6	E	H,H-L	Enable Signal				