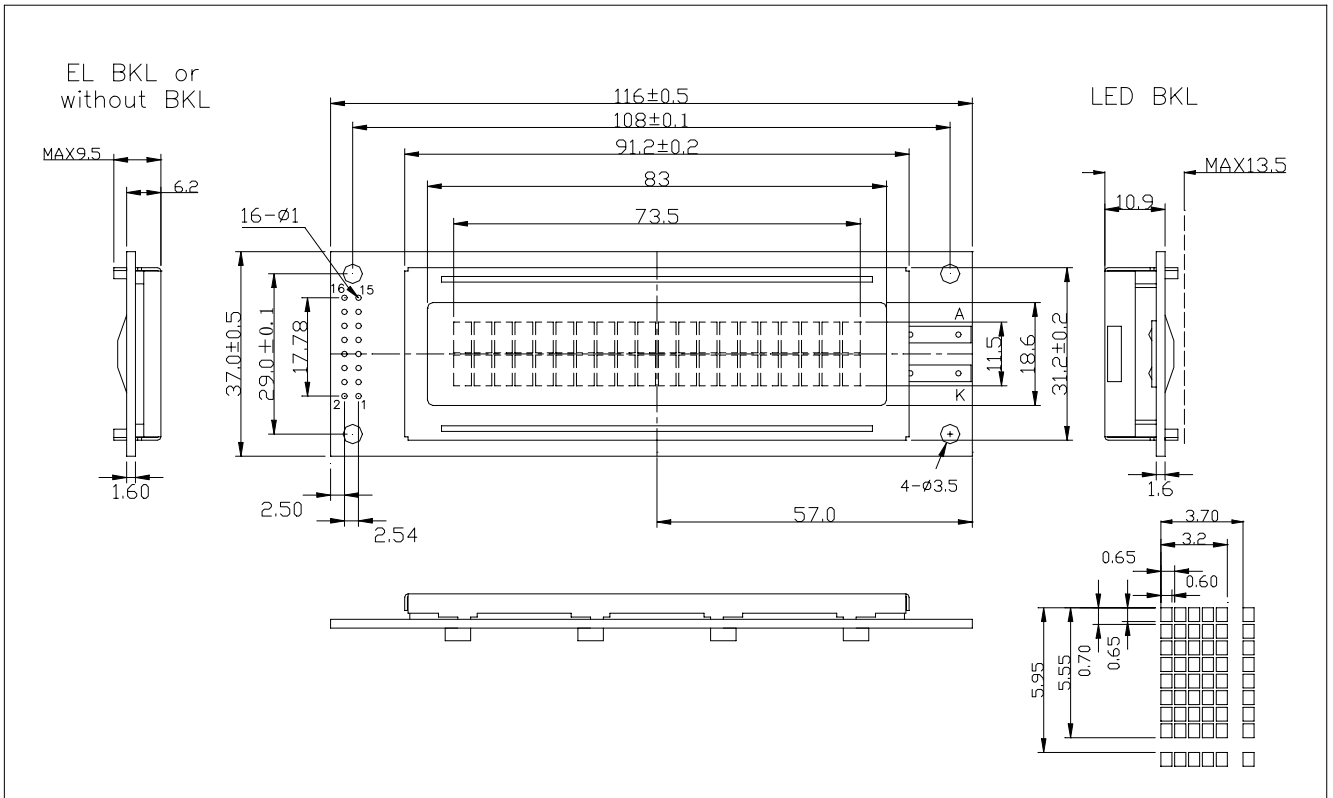


# ATM2002D SERIES ----- STANDARD CHARACTER LCD MODULES

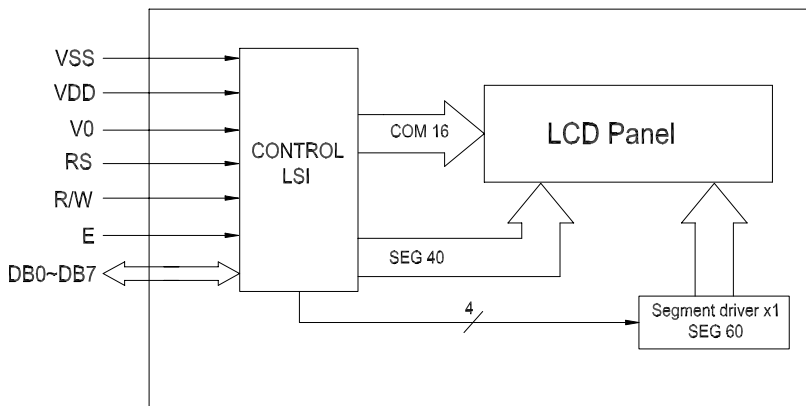
- \* 5 x 8 with Cursor Dots
- \* View Angle (6:00)
- \* 1/16 Duty, 1/5 Bias, 20CHAR x 2LINE
- \* LED Backlight

- \* Transflective/positive; Transmissive/negative
- \* STN / FSTN
- \* Controller/Driver (ST7066;ST7063 )
- \* Operating Temp (-20°C~70°C)

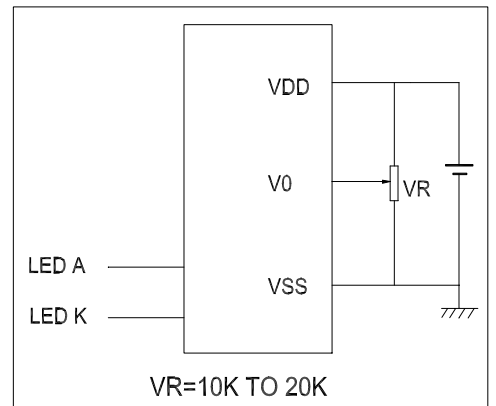
## External Dimensions



## Block Diagram



## Power Supply



## Mechanical Specifications

## Electrical Specifications

Item	Description(mm)	Item	Symbol	Min	Typ	Max	Unit
Size	116(L)x37(W)x13.5(H)	Supply Voltage for Logic	VDD	4.5	5.0	5.5	V
V.A	83(L)x13.6(W)	Supply Voltage for LCD	VLCD	4.0	4.5	5.0	V
Character Pitch	3.7 x 5.95	Supply Current for Logic	IDD		1.0	2.0	mA
Dot Size	0.60*0.65	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				