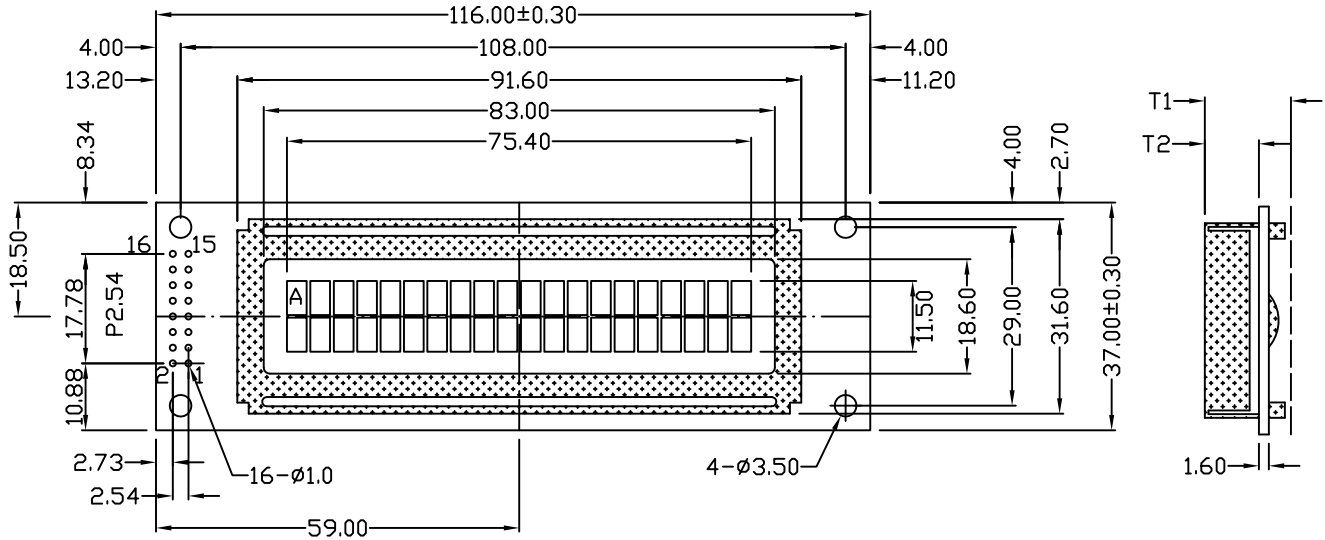
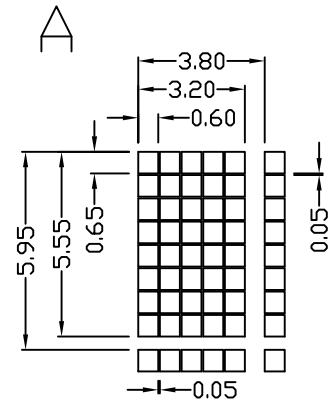
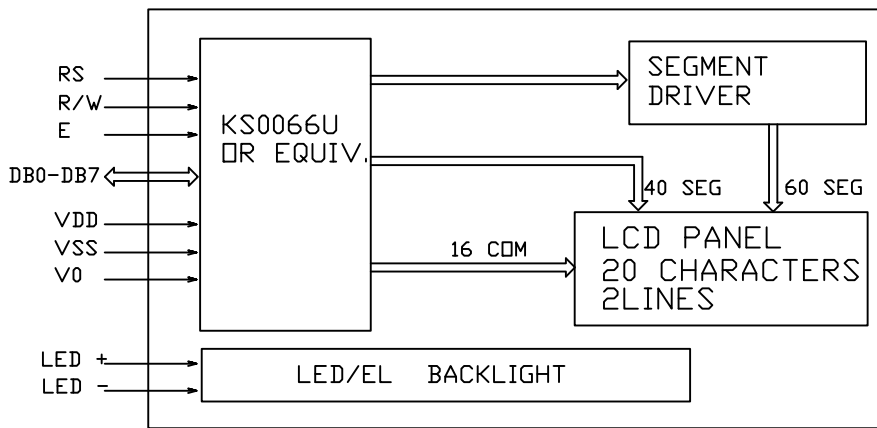


LINK-SUN (HONG KONG) ELECTRONICS LTD

Model No: LSM2002-1



* FOR LED BACKLIGHT
T1=14.0MAX T2=9.0±0.3
* FOR EL OR NO BACKLIGHT
T1=10.0MAX T2=5.0±0.3



PINS ASSIGNMENT		
NO.	SYMBOL	DESCRIPTION
1	VSS	POWER SUPPLY
2	VDD	POWER SUPPLY
3	V0	OPERATING VOLTAGE FOR LCD
4	RS	DATA/INSTRUCTION SELECT
5	R/W	READ/WRITE CONTROL
6	E	ENABLE SIGNAL
7--14	DB0--DB7	DATA BUS
15	LED +	POWER SUPPLY FOR LED BACKLIGHT (+)
16	LED -	POWER SUPPLY FOR LED BACKLIGHT (-)

ELECTRICAL CHARACTERISTICS (VDD=5.0±0.25V, 25°C)					
ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	1.0	2.2	mA
VOLTAGE FOR LCD	VDD-V0	-	4.6	-	V
INPUT VOLTAGE	H VIH	2.2	-	VDD	V
	L VIL	-0.3	-	0.6	V
OUTPUT VOLTAGE	H VoH	2.4	-	-	V
	L VoL	-	-	0.4	V

MECHANICAL SPECIFICATIONS		
ITEM	SPECIFICATION	UNIT
OVERALL SIZE	116.0W x 37.0H x 14.0T(10.0T)	MM
VIEWING AREA	83.0W x 18.6H	MM
CHARACTERS	20 CHARACTERS x 2 LINES	
CHARACTER SIZE	3.20W x 5.55H	MM
CHARACTER PITCH	3.80W x 5.95H	MM

OPTIONS	
1.	LCD TYPE: Y/G STN; GRAY STN; TN
2.	BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
3.	COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
4.	TEMPERATURE RANGE: NORMAL(-50°C) EXTENDED(-20°C--70°C)
5.	POWER SUPPLY: 5.0V; 3.0V
6.	VIEWING ANGLE: 6H; 12H
7.	CHARACTER TABLE: JAPANESE; EUROPEAN; CYRILLIC

ABSOLUTE MAXIMUM RATING				
ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	-0.3	7.0	V
POWER SUPPLY(LCD DRV.)	VDD-V0	-0.3	13.5	V
INPUT VOLTAGE	VI	-0.3	VDD	V