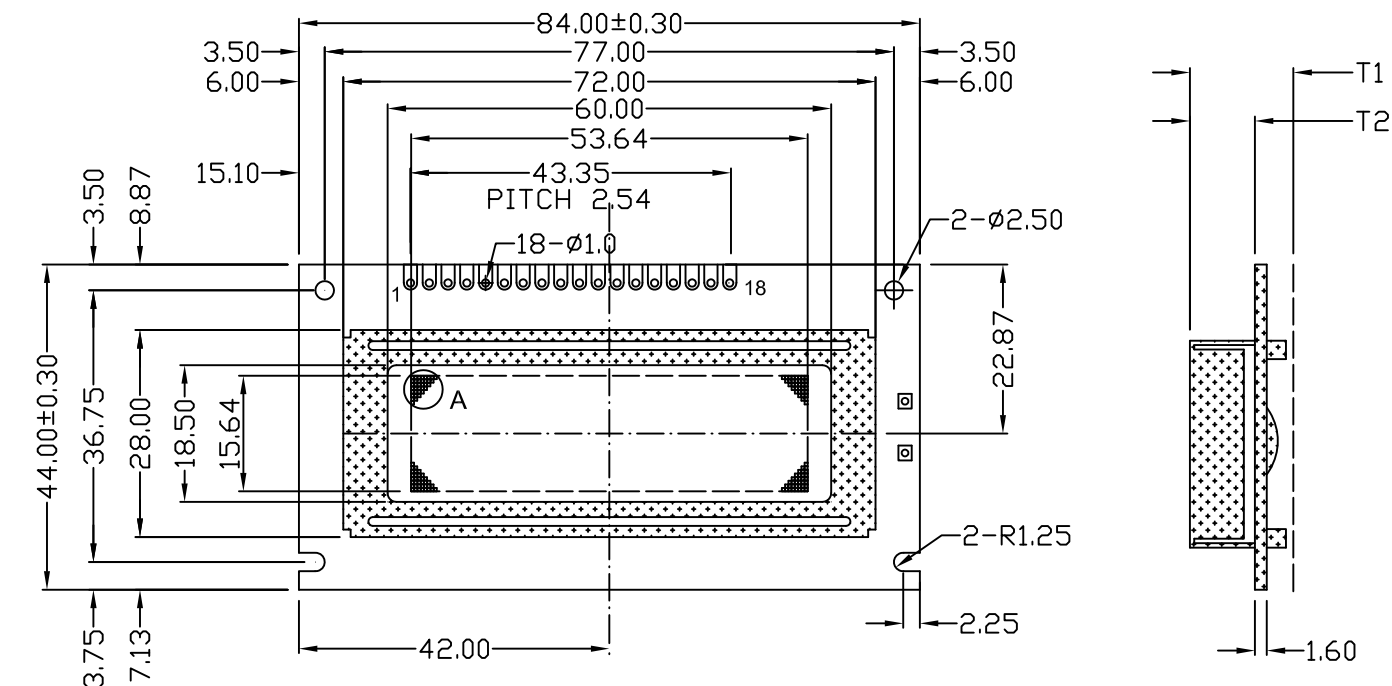
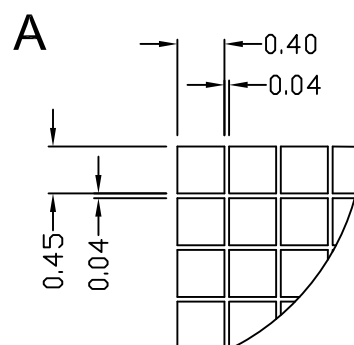
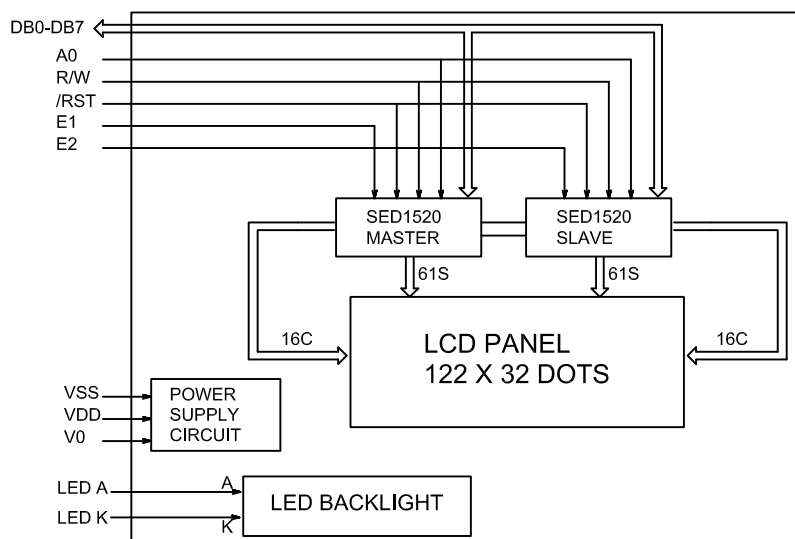


LINK-SUN (HONG KONG) ELECTRONICS LTD

Model No: LSM12232-1



* FOR LED BACKLIGHT
T1=14.0MAX T2=9.0 $\pm$ 0.3
* FOR EL OR NO BACKLIGHT
T1=11.0MAX T2=6.0 $\pm$ 0.3



PINS ASSIGNMENT

NO.	SYMBOL	DESCRIPTION
1	VSS	GROUND
2	VDD	POWER SUPPLY FOR LOGIC AND LCD
3	V0	OPERATING VOLTAGE FOR LCD
4	A0	DATA/INSTRUCTION SELECT
5	E1	READ/WRITE ENABLE SIGNAL(MASTER)
6	E2	READ/WRITE ENABLE SIGNAL(SLAVE)
7	R/W	READ/WRITE SELECT
8--15	DB0-DB7	DATA BUS
16	/RST	RESET SIGNAL(LOW EFFECTIVE)
17	A	POWER SUPPLY FOR LED BACKLIGHT(+)
18	K	POWER SUPPLY FOR LED BACKLIGHT(-)

OPTIONS

1. LCD TYPE: Y/G STN; GRAY STN;
2. BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
3. COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
4. TEMPERATURE RANGE: NORMAL(0-50C); EXTENDED(-20-70C)
5. POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V); DUAL POWER SUPPLY(5.0V & -5.0V)
6. VIEWING ANGLE: 6H; 12H

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	300	500	uA
LCD OPERATING VOLTAGE	0C	-	5.5	-	V
	25C	-	4.8	-	V
	40C	-	4.6	-	V
INPUT VOLTAGE	H ViH	0.8VDD	-	VDD	V
	L ViL	0	-	0.2VDD	V

MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
OVERALL SIZE	84.0W x 44.0H x 14.0T(10.0T)	MM
VIEWING AREA	60.0W x 18.5H	MM
DOT NUMBER	122 x 32	DOTS
DOT SIZE	0.40W x 0.45H	MM
DOT PITCH	0.44W x 0.49H	MM

ABSOLUTE MAXIMUM RATING

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	0	6.5	V
POWER SUPPLY(LCD DRV.)	VDD-V0	0	10.0	V
INPUT VOLTAGE	Vi	Vi	VDD	V