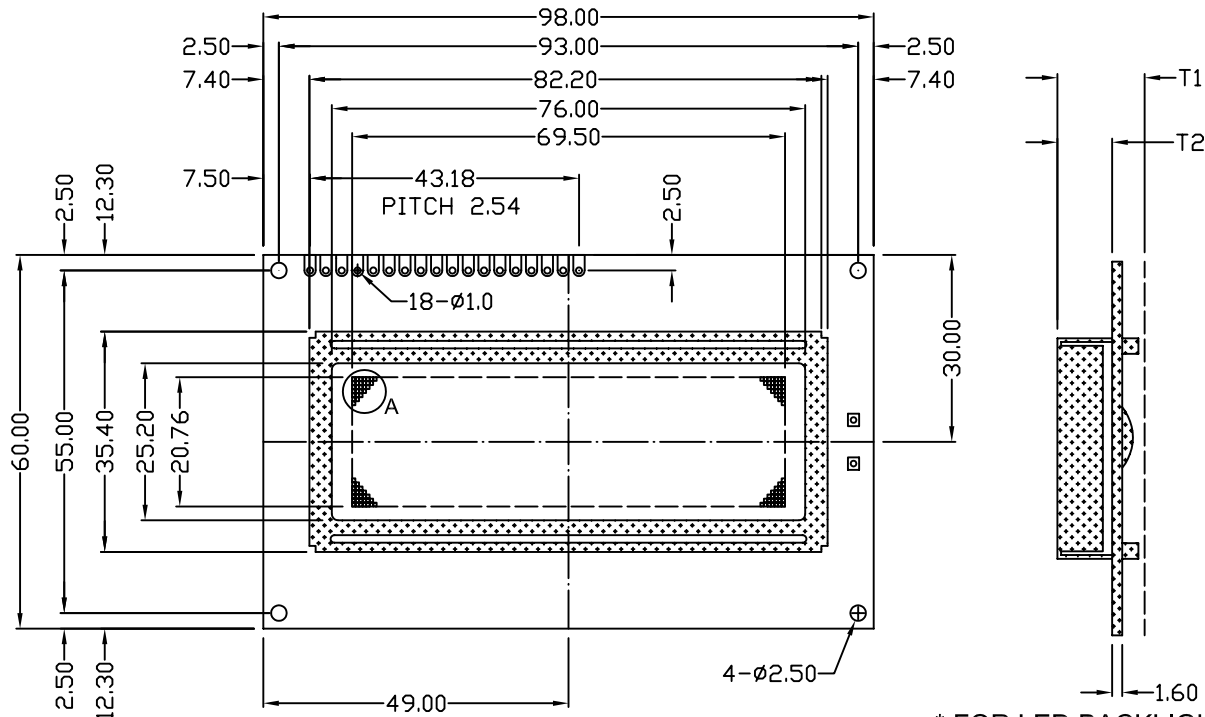
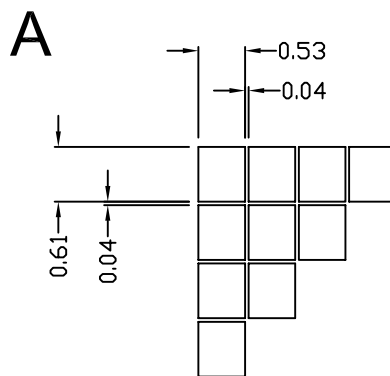
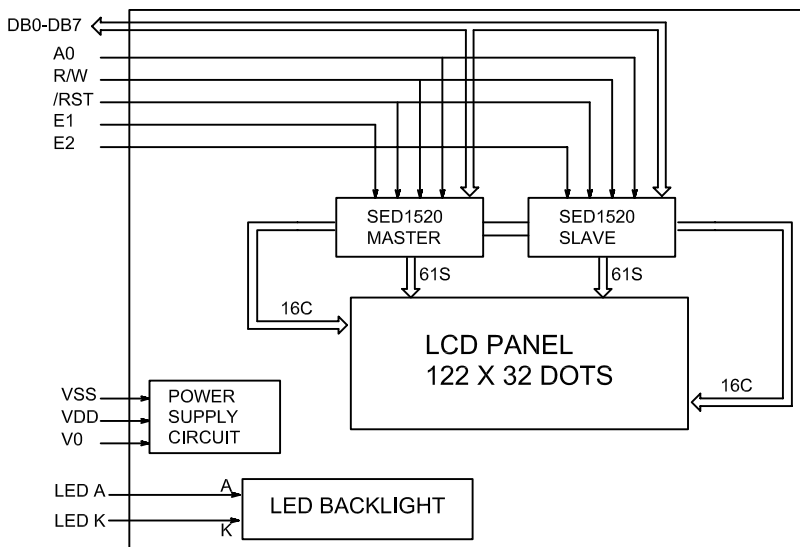


# LINK-SUN (HONG KONG) ELECTRONICS LTD

## Model No: LSM12232-2



\* FOR LED BACKLIGHT  
T1=14.0MAX T2=9.0±0.3  
\* FOR EL OR NO BACKLIGHT  
T1=11.0MAX T2=6.0±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)   |
| 7-14            | DB0-DB7 | DATA BUS                          |
| 15              | A       | POWER SUPPLY FOR LED BACKLIGHT(+) |
| 16              | K       | POWER SUPPLY FOR LED BACKLIGHT(-) |
| 17              | R/W     | READ/WRITE SELECT                 |
| 18              | /RST    | RESET SIGNAL(LOW EFFECTIVE)       |

| 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      | VDD-V0  | 0C   | -      | 6.2    | V    |
|                            |         | 25C  | -      | 5.8    | V    |
|                            |         | 40C  | -      | 5.6    | V    |
| INPUT VOLTAGE              | H       | VIH  | 0.8VDD | VDD    | V    |
|                            | L       | VIL  | 0      | 0.2VDD | V    |

| MECHANICAL SPECIFICATIONS |                              |      |
|---------------------------|------------------------------|------|
| ITEM                      | SPECIFICATION                | UNIT |
| OVERALL SIZE              | 98.0W x 60.0H x 14.0T(10.0T) | MM   |
| VIEWING AREA              | 76.0W x 25.2H                | MM   |
| DOT NUMBER                | 122 x 32                     | DOTS |
| DOT SIZE                  | 0.53W x 0.61H                | MM   |
| DOT PITCH                 | 0.57W x 0.65H                | MM   |

| 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);<br>EXTENDED(-20-70C)                        |
| 5.      | POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V);<br>DUAL POWER SUPPLY(5.0V & -5.0V) |
| 6.      | VIEWING ANGLE: 6H; 12H  |

| 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    |