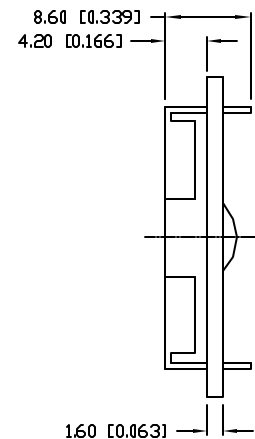
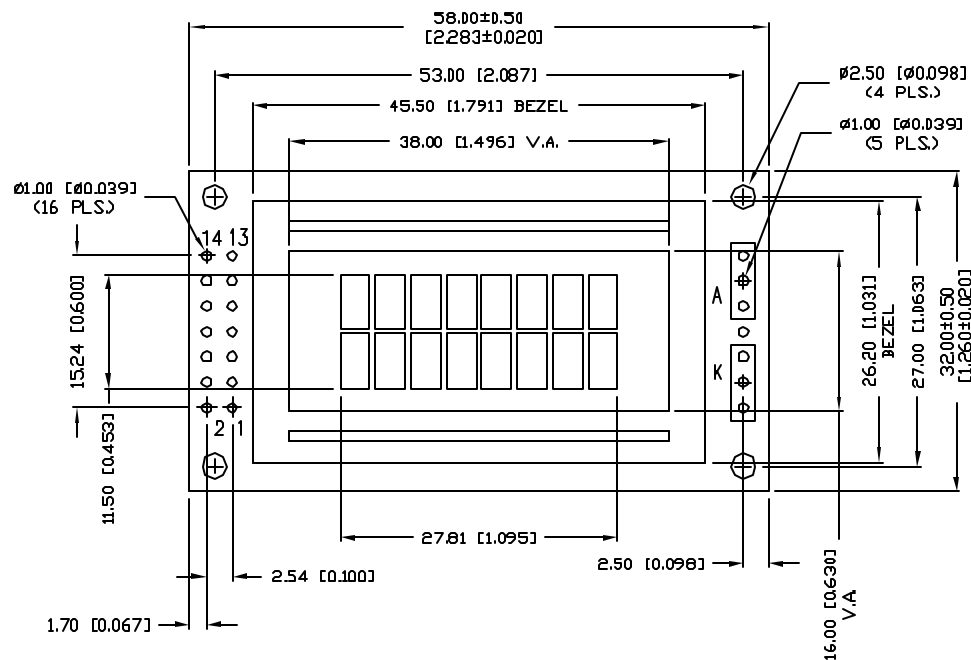


PART NUMBER  
LCM-S00802DLR

**CAUTION: STATIC SENSITIVE DEVICE**  
**FOLLOW PROPER E.S.D. HANDLING PROCEDURES**  
**WHEN WORKING WITH THIS PART.**



REV.

PART NUMBER  
LCM-S00802DLR

5.56mm CHARACTER HEIGHT, 5x8 DOT MATRIX, 8x2,  
LCD MODULE, 1/16 DUTY, 1/5 BIAS, 3.3V STN.

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT  
SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE.  
PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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CHECKED BY:

APPROVED BY:

DATE: 03.25.08

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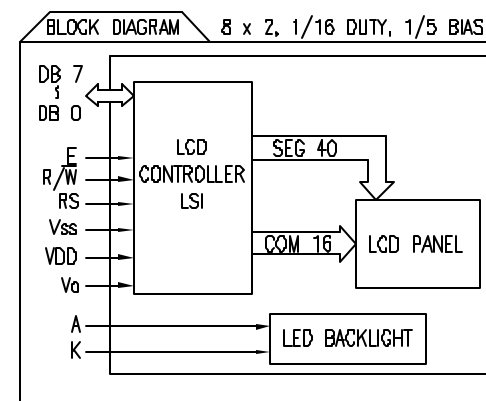
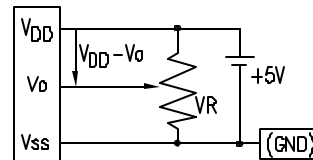
PAGE: 1 OF 2

SCALE: N/A

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| PIN CONFIGURATION |                 |        |                                                                 |
|-------------------|-----------------|--------|-----------------------------------------------------------------|
| PIN NO.           | SYMBOL          | LEVEL  | FUNCTION                                                        |
| 1                 | V <sub>SS</sub> | -      | POWER SUPPLY<br>GND (0V)<br>3.3V<br>FOR LCD DRIVE               |
| 2                 | V <sub>DD</sub> | -      |                                                                 |
| 3                 | V <sub>O</sub>  | -      |                                                                 |
| 4                 | RS              | H/L    | REGISTER SELECT SIGNAL<br>H: DATA INPUT<br>L: INSTRUCTION INPUT |
| 5                 | R/W             | H/L    | H: DATA READ (MODULE-->MPU)<br>L: DATA WRITE (MODULE<--MPU)     |
| 6                 | E               | H,H->L | ENABLE                                                          |
| 7~14              | DB0~DB7         | H/L    | DATA BUS—SOFTWARE SELECTABLE 4 OR 8 BIT MODE.                   |

V<sub>DD</sub>-V<sub>O</sub>: LCD DRIVING VOLTAGE  
VR: 10KΩ-20KΩ



| ELECTRICAL CHARACTERISTICS |                   | V <sub>DD</sub> =2.7V to 4.5V, T <sub>A</sub> =25°C |                      | STANDARD VALUE |      |                 | UNIT              |
|----------------------------|-------------------|-----------------------------------------------------|----------------------|----------------|------|-----------------|-------------------|
| ITEM                       |                   | SYMBOL                                              | CONDITION            | MIN.           | TYP. | MAX.            |                   |
| SUPPLY VOLTAGE FOR LOGIC   |                   | V <sub>DD</sub> -V <sub>SS</sub>                    | -                    | 2.7            | 3.3  | 4.5             | V                 |
| SUPPLY CURRENT FOR LOGIC   |                   | I <sub>DD</sub>                                     | V <sub>DD</sub> =5V  | -              | 1.5  | 2.0             | mA                |
| INPUT VOLTAGE              | HIGH              | V <sub>IH</sub>                                     | -                    | 2.2            | -    | V <sub>DD</sub> | V                 |
|                            | LOW               | V <sub>IL</sub>                                     | -                    | 0              | -    | 0.6             | V                 |
| OUTPUT VOLTAGE             | HIGH              | V <sub>OH</sub>                                     | -                    | 2.4            | -    | -               | V                 |
|                            | LOW               | V <sub>OL</sub>                                     | -                    | -              | -    | 0.4             | V                 |
| *LED BACKLIGHT             | VOLTAGE           | V <sub>f</sub>                                      | I <sub>f</sub> =70mA | -              | 4.5  | 5.0             | V                 |
|                            | CURRENT           | I <sub>f</sub>                                      | -                    | -              | 70   | 110             | mA                |
|                            | POWER CONSUMPTION | P <sub>D</sub>                                      | -                    | -              | 315  | -               | mW                |
|                            | LUMINOUS          | L                                                   | I <sub>f</sub> =70mA | 70             | -    | -               | cd/m <sup>2</sup> |
|                            | COLOR             | -                                                   | -                    | -              | -    | -               | nm                |

\*ONLY APPLIES TO MODULES WITH BACKLIGHT

## ABSOLUTE MAXIMUM RATINGS

| ITEM                         | SYMBOL                           | TEST CONDITION       | STANDARD VALUE  |                 | UNIT |
|------------------------------|----------------------------------|----------------------|-----------------|-----------------|------|
|                              |                                  |                      | MIN             | MAX             |      |
| SUPPLY VOLTAGE FOR LOGIC     | V <sub>DD</sub> -V <sub>SS</sub> | T <sub>a</sub> =25°C | 2.7             | 4.5             | V    |
| SUPPLY VOLTAGE FOR LCD DRIVE | V <sub>DD</sub> -V <sub>O</sub>  | T <sub>a</sub> =25°C | 2.7             | 4.5             | V    |
| INPUT VOLTAGE                | V <sub>I</sub>                   | T <sub>a</sub> =25°C | V <sub>SS</sub> | V <sub>DD</sub> | V    |
| OPERATING TEMPERATURE        | T <sub>opr</sub>                 | LCM-S                | 0               | 50              | °C   |
| STORAGE TEMPERATURE          | T <sub>stg</sub>                 | LCM-S                | -20             | 70              | °C   |

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION

REV.

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