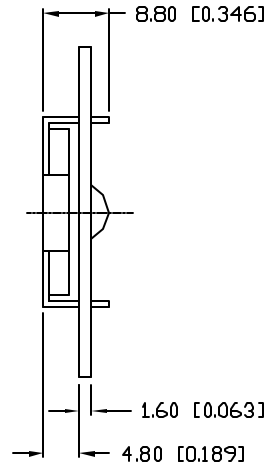
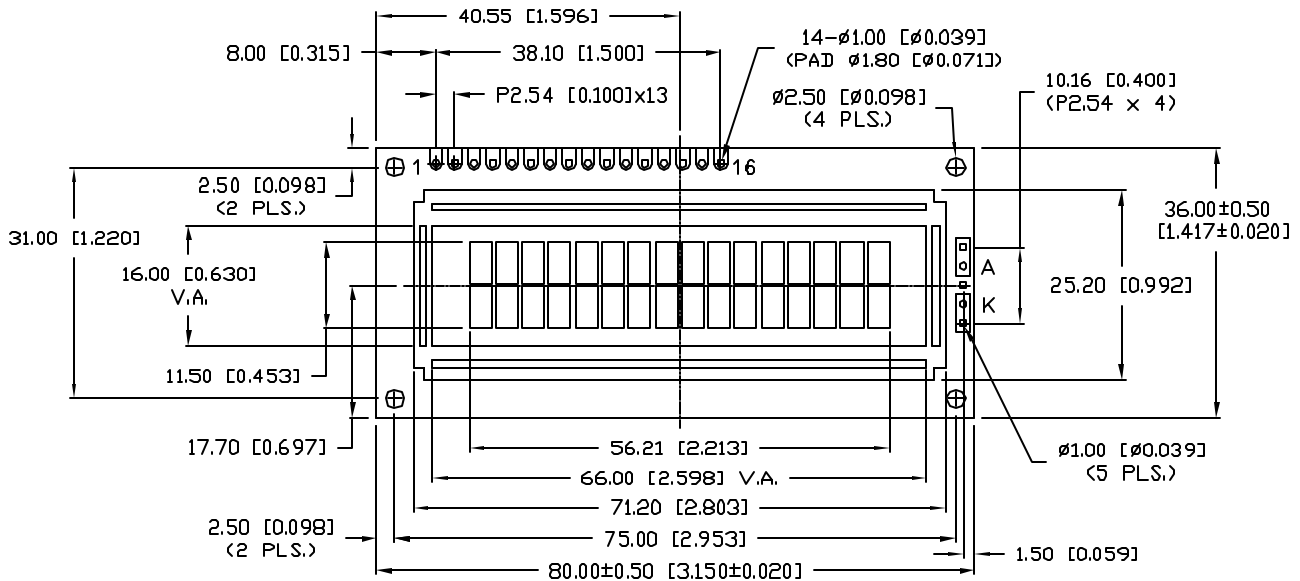
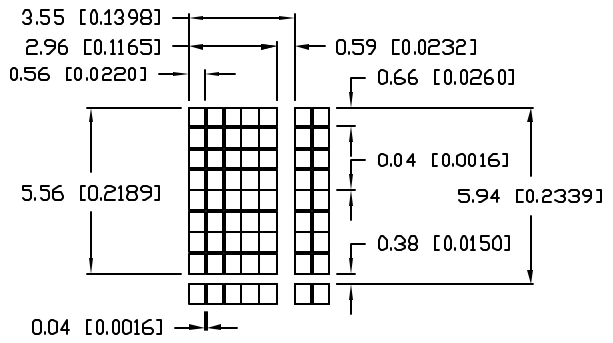


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

CHARACTER DETAIL



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

| | |
|------|-------------------|
| REV. | PART NUMBER |
| | LCM-S01602DTR/A-3 |

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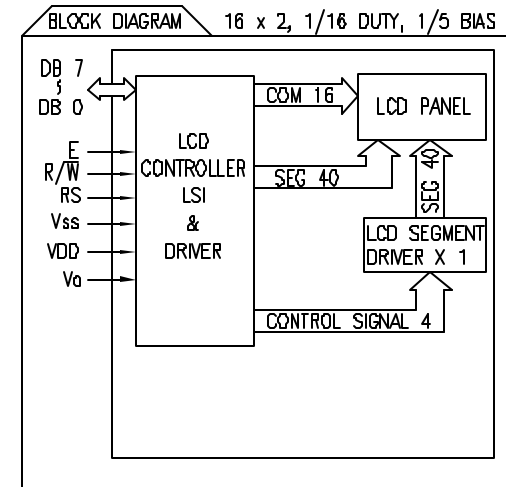
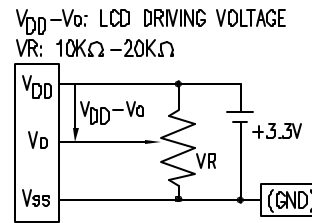
RELIABILITY NOTE
OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

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5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, RELECTIVE,
16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS, TN, REFLECTIVE.

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|-----------------|-------------|--------------|---------------|
| DRAWN BY: JD | CHECKED BY: | APPROVED BY: | DATE: 7.27.04 |
| | | | PAGE: 1 OF 2 |
| | | | SCALE: N/A |

| PIN CONFIGURATION | | | |
|-------------------|-----------------|--------|---|
| PIN NO. | SYMBOL | LEVEL | FUNCTION |
| 1 | V _{SS} | - | POWER SUPPLY GND (0V) |
| 2 | V _{DD} | - | |
| 3 | V _O | - | |
| 4 | RS | H/L | REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT |
| 5 | R/W | H/L | H: DATA READ (MODULE-->MPU) 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. |
| 15 | | | NO CONNECTION |
| 16 | | | NO CONNECTION |



| ELECTRICAL CHARACTERISTICS | | V _{DD} =2.7V to 4.5V, T _A =25°C | | | | |
|----------------------------|----------------------------------|---|---------------------|------|--------------------|------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
| | | | MIN. | TYP. | MAX. | |
| SUPPLY VOLTAGE FOR LOGIC | V _{DD} -V _{SS} | - | - | 3.3 | - | V |
| SUPPLY CURRENT FOR LOGIC | I _{DD} | V _{DD} =3.3V | - | 2.0 | 3.0 | mA |
| INPUT VOLTAGE | HIGH | V _{IH} | 0.7V _{DD} | - | V _{DD} | V |
| | LOW | V _{IL} | -0.3 | - | 0.55 | V |
| OUTPUT VOLTAGE | HIGH | V _{OH} | 0.75V _{DD} | - | - | V |
| | LOW | V _{OL} | - | - | 0.2V _{DD} | V |

| ABSOLUTE MAXIMUM RATINGS | | | | | |
|------------------------------|----------------------------------|----------------------|-----------------|-----------------|------|
| ITEM | SYMBOL | TEST CONDITION | STANDARD VALUE | | UNIT |
| | | | MIN | MAX | |
| SUPPLY VOLTAGE FOR LOGIC | V _{DD} -V _{SS} | T _a =25°C | 2.7 | 4.5 | V |
| SUPPLY VOLTAGE FOR LCD DRIVE | V _{DD} -V _O | - | 2.2@50°C | 4.3@0°C | V |
| INPUT VOLTAGE | V _I | T _a =25°C | V _{SS} | V _{DD} | V |
| OPERATING TEMPERATURE | T _{opr} | LCM-S | 0 | 50 | °C |
| STORAGE TEMPERATURE | T _{stg} | LCM-S | -20 | 70 | °C |

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| | |
|--|----------------------------------|
| REV. | PART NUMBER LCM-S01602DTR/A-3 |
| 5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, RELECTIVE, 16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS, TN, REFLECTIVE. | |

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| | | | PAGE: 2 OF 2 |
| | | | SCALE: N/A |