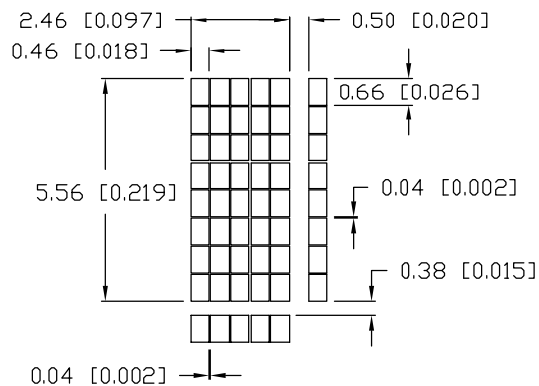


CHARACTER DETAIL



*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. | PART NUMBER LCM-S01602DTF/M |
|------|--------------------------------|

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.



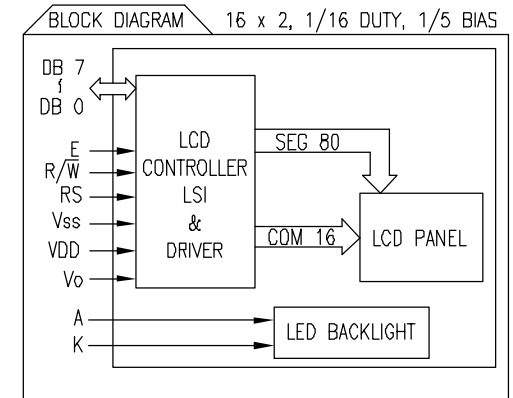
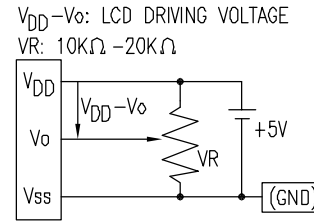
290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

16 x 2 CHARACTER LCD MODULE, TN, REFLECTIVE.
1/16 DUTY, 1/5 BIAS, WITH LED BACKLIGHT.

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.

| | | | |
|-----------------|-------------|--------------|---------------|
| DRAWN BY: ct | CHECKED BY: | APPROVED BY: | DATE: 9.11.02 |
| | | | PAGE: 1 OF 2 |
| | | | SCALE: N/A |

| PIN CONFIGURATION | | | | |
|-------------------|-----------------|--------|-----------------------------------------------------------------|---------------------|
| PIN NO. | SYMBOL | LEVEL | FUNCTION | |
| 1 | V _{SS} | - | POWER SUPPLY | |
| 2 | V _{DD} | - | | GND (0V) |
| 3 | V _O | - | | 5V FOR LCD DRIVE |
| 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 | A | - | ANODE | |
| 16 | K | - | CATHODE | |



| ELECTRICAL CHARACTERISTICS | | V _{DD} =4.7V to 5.3V, T _A =25°C | | | | |
|----------------------------|----------------------------------|-----------------------------------------------------|----------------------|------|------|-----------------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
| | | | MIN. | TYP. | MAX. | |
| SUPPLY VOLTAGE FOR LOGIC | V _{DD} -V _{SS} | - | - | 5.0 | - | V |
| SUPPLY CURRENT FOR LOGIC | I _{DD} | V _{DD} =5V | - | 2.0 | 3.0 | mA |
| INPUT VOLTAGE | HIGH | V _{IH} | - | 2.2 | - | V _{DD} |
| | LOW | V _{IL} | - | 0 | - | 0.6 |
| OUTPUT VOLTAGE | HIGH | V _{OH} | - | 2.4 | - | V |
| | LOW | V _{OL} | - | - | - | 0.4 |
| *LED BACKLIGHT | VOLTAGE | V _f | I _f =40mA | 4.0 | 4.2 | - |
| | CURRENT | I _f | - | 40 | 80 | - |
| | POWER CONSUMPTION | P _D | - | - | 336 | - |
| | LUMINOUS | L | I _f =40mA | 50 | - | - |
| 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 _{DD} -V _{SS} | T _a =25°C | 4.7 | 5.3 | V |
| SUPPLY VOLTAGE FOR LCD DRIVE | V _{DD} -V _O | - | 4.2@50°C | 4.8@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 |

*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. | PART NUMBER LCM-S01602DTF/M |
| 16 x 2 CHARACTER LCD MODULE, TN, REFLECTIVE. 1/16 DUTY, 1/5 BIAS, WITH LED BACKLIGHT. | |

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

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.

| | | | |
|-----------------|-------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| | | 290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw | |
| DRAWN BY: CT | CHECKED BY: | APPROVED BY: | DATE: 9.11.02 PAGE: 2 OF 2 SCALE: N/A |

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [LCD Character Display Modules & Accessories](#) category:

Click to view products by [Lumex](#) manufacturer:

Other Similar products are found below :

[HG9Z-AC501](#) [HG9Z-SCI25B](#) [HG9Z-XC300](#) [LCD-S401M14TF](#) [LCM-S01602DTRA-3](#) [HDM16216L-S-L30S](#) [HG9Z-XC13A](#) [HG9Z-XC213](#)
[C216L01YBW00](#) [LCM-S01602DSF/Q](#) [EA FL-10P](#) [MDLS-161612-G-LV-LED4G](#) [MDLS24265LVLED04](#) [MDLS-20265-LV-GLED4G](#)
[NHD-0420AZ-FSW-GBW-33V33-0](#) [PC2004LRS-AWB-B-Q](#) [CM1644-SGR1](#) [C216W01BBW00](#) [C420W01NBW00](#) [C220W04NBW00](#)
[C220L01YBWR00](#) [C216N04YBW00](#) [G64128W23NBW00](#) [G64128W18NBW00](#) [G64128Z24UBW00](#) [G64128W20BBW00](#)
[G64128W22BBW00](#) [G64128W25NBW00](#) [162A BC BW](#) [LCM-S02002DSM-Y](#) [MOP-AL202C-BYFY-25E-3IN](#) [NHD-0416BZ-FL-GBW-](#)
[SED](#) [162D BA BC](#) [MDLS-40466-G-HV](#) [HDM24216H-2-P9XS](#) [MIKROE-4169](#) [MDLS-82603-LV-G](#) [MDLS-16263-C-LV-G-LED01G-FFC](#)
[VIM-404-DP-RC-S-HV](#) [LCD-S401M16KR](#) [LED4-20265](#) [NHD-0440WH-ATFH-JT#](#) [EA 9907-DIP](#) [GLK12232A25SMUSBWBVSE](#)
[GLK19264A-7T-1U-USB-FGW](#) [GLK19264A-7T-1U-USB-WB](#) [GLK12232A25SMUSBGWVSE](#) [NHD-0212WH-AYGH-JT#](#) [LCD-](#)
[S3X1C50TR/A](#) [LCM-H12864GSF/H-Y](#)