



15301 West 109<sup>th</sup> St, Lenexa, KS 66219

**INCORPORATED** 913-982-5672 913-982-5766 Fax

**DCI242A** 24 character x 2 lines

**1/16DUTY, 1/5BIAS**

**PINOUT (Drivers/Controllers KS0065B, KS0070B, KS0063)**

| PIN     | SYMBOL     | SIGNAL DESCRIPTION                      |
|---------|------------|-----------------------------------------|
| 1       | GND        | Power Supply: 0V                        |
| 2       | Vdd        | Power Supply: +5V                       |
| 3       | V5         | Power Supply for LCD                    |
| 4       | RS         | Register Select(H=DATA L=Instruction)   |
| 5       | R/W        | Read/Write<br>L=MPU to LCM.H=LCM to MPU |
| 6       | E          | Enable                                  |
| 7 to 14 | DB0 to DB7 | Data Bus for 4bit or 8bit Mode          |
| 15      | A          | Anode of LED Unit                       |
| 16      | K          | Cathode of LED Unit                     |

**ABSOLUTE MAXIMUM RATINGS**

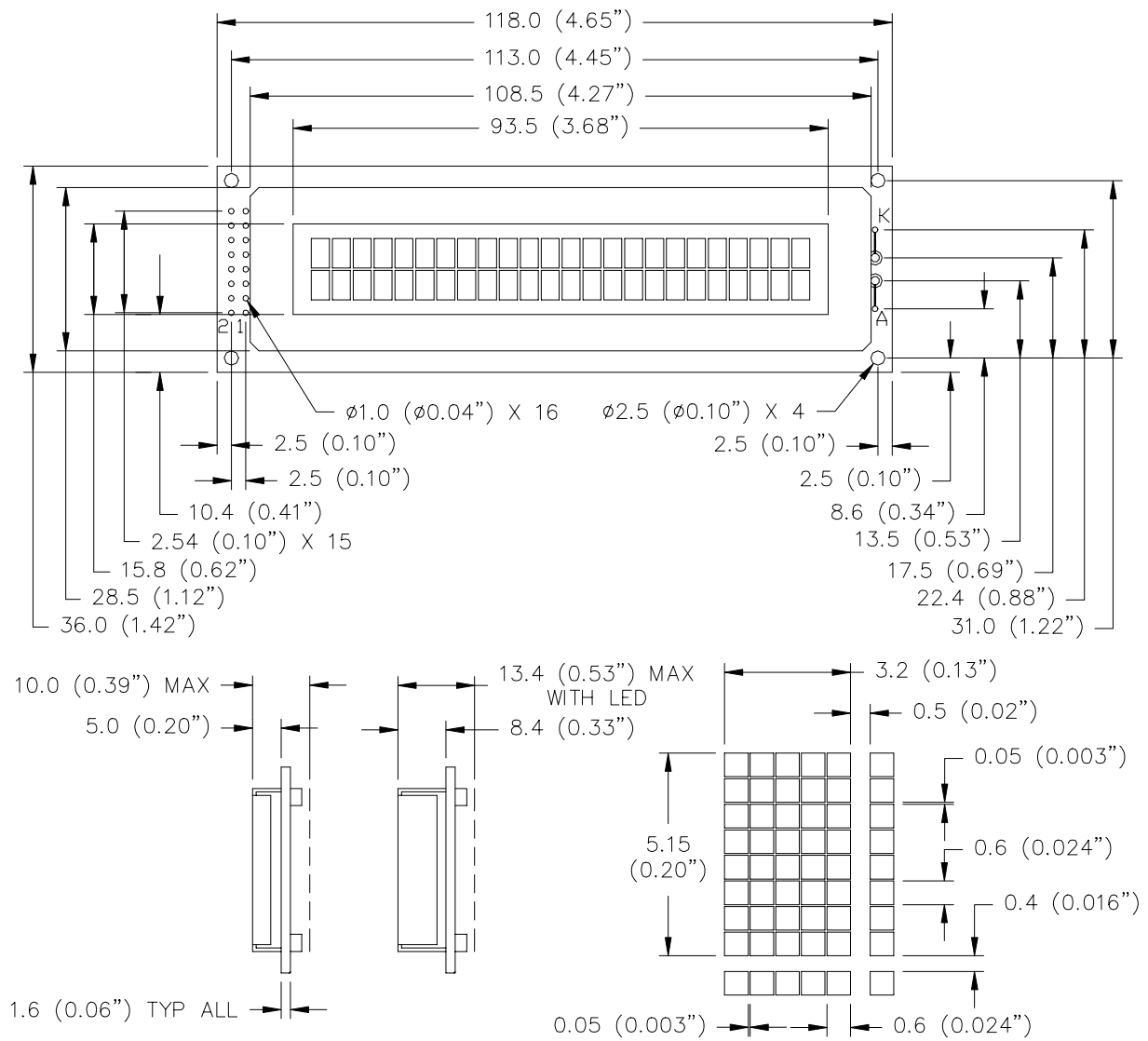
| PARAMETER             | MIN.     | TYP. | MAX.    | UNIT |
|-----------------------|----------|------|---------|------|
| Supply Voltage        | -0.3     | N/A  | 7.0     | V    |
| LCD Supply Voltage    | Vdd-13.5 | N/A  | 0       | V    |
| Input Voltage         | -0.3     | N/A  | Vdd+0.3 | V    |
| Operating Temperature | 0        | N/A  | 50      | °C   |
| Storage Temperature   | -20      | N/A  | 70      | °C   |

**ELECTRICAL CHARACTERISTICS (@ 25°C)**

| ITEM                   | CONDITION   | MIN. | TYP. | MAX. | UNIT |
|------------------------|-------------|------|------|------|------|
| Supply Voltage (logic) | -           | 4.5  | 5.0  | 5.5  | V    |
| Supply Current (logic) | Vdd=5.0V    | -    | 1.50 | 3.0  | mA   |
| Driving Current (LCD)  |             | -    | 0.40 | 1.0  | mA   |
| Driving Voltage (LCD)  |             | 3.8  | 4.5  | 4.9  | V    |
| Input Voltage "H"      |             | 2.2  | -    | Vdd  | V    |
| Input Voltage "L"      |             | -0.3 | -    | 0.6  | V    |
| Output Voltage "H"     | Ioh=0.205mA | 2.4  | -    | -    | V    |
| Output Voltage "L"     | Iol=1.2mA   | -    | -    | 0.4  | V    |

**BACKLIGHT CHARACTERISTICS (@ 25°C)**

| PARAMETER                       | CONDITION         | MIN | TYP. | MAX. | UNIT |
|---------------------------------|-------------------|-----|------|------|------|
| Supply Voltage                  | -                 | -   | 4.1  | -    | V    |
| LED Forward Consumption Current | @ 25°C<br>Vf=4.1V | -   | 128  | -    | mA   |
| LED Allowable Dissipation       | -                 | -   | 525  | -    | mW   |



## MECHANICAL DATA 24X2A

\* Module thickness with backlight 13.4 mm (.52")

| ITEM                     | SPECIFICATION                          | MM(IN) |
|--------------------------|----------------------------------------|--------|
| Module Size<br>(WxHxT)   | 118.0x36.0x10.0<br>(4.65"x1.42"x0.39") | mm(in) |
| Viewing Area<br>(WxH)    | 93.5x15.8<br>(3.68"x0.62")             | mm(in) |
| Character Font<br>(WxH)  | 5x7+cursor                             | dots   |
| Character Size<br>(WxH)  | 3.20x5.15<br>(0.13"x0.20")             | mm(in) |
| Character Pitch<br>(WxH) | 3.7x5.55<br>(0.14"x0.21")              | mm(in) |
| Dot Size<br>(WxH)        | 0.6x0.6<br>(0.024"x0.024")             | mm(in) |