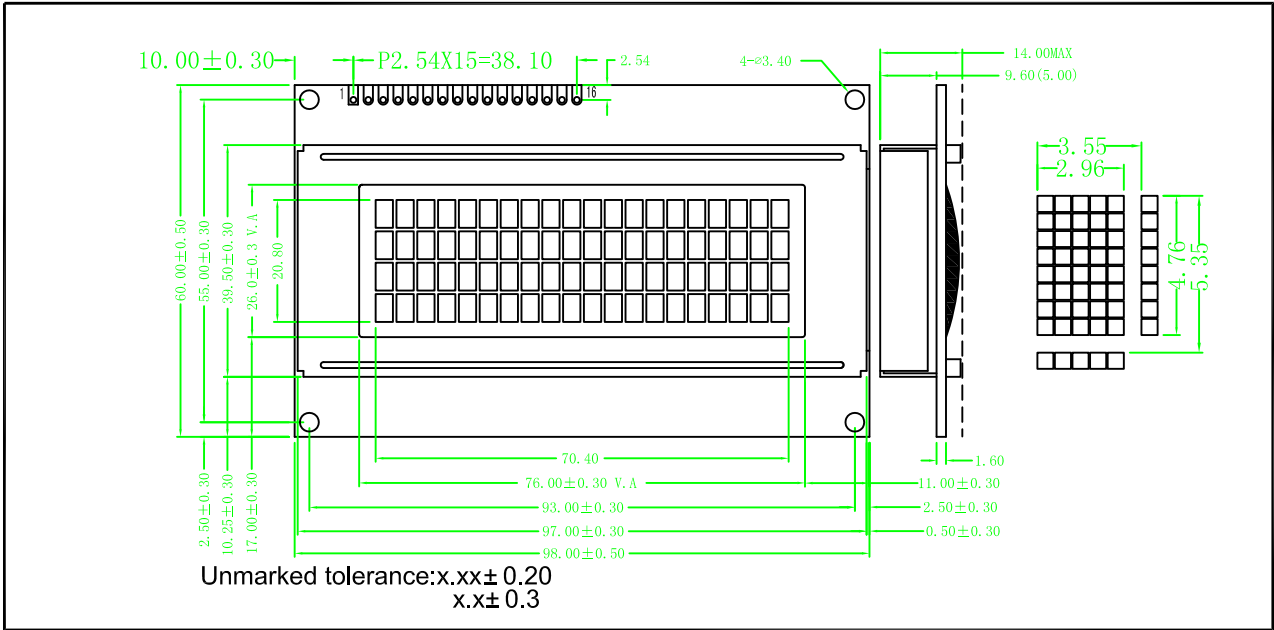


CHARACTER-COB

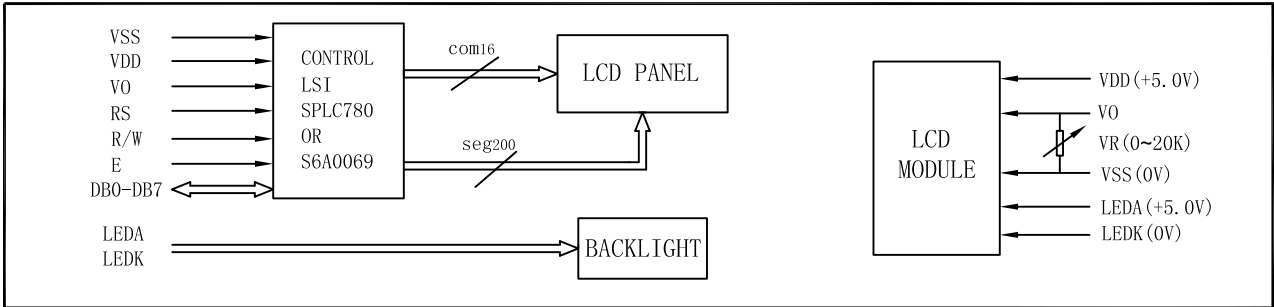
# RG2004A Series

20X4 CHARACTERS  
1/16 DUTY, 1/5 BIAS

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

| LTEM                  | NORMAL DIMENSIONS (MM) | FEATURE               |   |
|-----------------------|------------------------|-----------------------|---|
| MODULE SIZE (W*H*T)   | 98.0 X 60.0 X 14.0     | LCD TYPE              | STN TN HTN FSTN                                 |
| VIEW AREA (W*H)       | 76.0 X 26.0            | LCD COLOUR            | STN: YELLOW-GREEN, GRAY, OTHER: GRAY            |
| CHARACTER PITCH (W*H) | 3.55 X 5.35            | VIEW ANGLE            | 6 O' CLOCK, 12 O' CLOCK                         |
| CHARACTER SIZE (W*H)  | 2.96 X 4.76            | DISPLAY TYPE          | POSITIVE TYPE, NEGATIVE TYPE                    |
| CHARACTER FONT        | 5 X 8                  | REAR POLARIZER        | TRANSMISSIVE, REFLECTIVE, TRANSELECTIVE         |
| DOT PITCH (W*H)       | 0.60 X 0.60            | OPERATING TEMPERATURE | -10°C ~ 60°C    -20°C ~ 70°C                    |
| DOT SIZE (W*H)        | 0.56 X 0.56            | BACKLIGHT             | LED: YELLOW EL: GREEN, BLUE-GREEN, BLUE WITHOUT |

ELECTRICAL CHARACTERISTICS

| LTEM                         | SYMBOL | TEST CONDITION    | MIN | TYP | MAX | UNIT |
|------------------------------|--------|-------------------|-----|-----|-----|------|
| OPERATING VOLTAGE            | VDD    | Ta=25°C           | --- | 5.0 | --- | V    |
| OPERATING VOLTAGE FOR LCD    | VLCD   | Ta=25°C           | --- | 4.7 | --- | V    |
| SUPPLY CURRENT               | IDD    | Ta=25°C, VDD=5.0V | --- | 2.0 | 3.0 | MA   |
| SUPPLY CURRENT FOR BACKLIGHT | IF     | Ta=25°C, VF=4.2V  | --- | 100 | --- | MA   |

INTERFACE PIN CONNECTIONS

| PIN NO | SYMBOL  | LEVEL | DESCRIPTION  |
|--------|---------|-------|--|
| 1      | VSS     | ---   | GROUND FOR LOGIC   |
| 2      | VDD     | ---   | POWER SUPPLY FOR LOGIC   |
| 3      | VO      | ---   | POWER SUPPLY FOR LCD DRIVE                                     |
| 4      | RS      | H/L   | REGISTER SELECTION (H: DATA REGISTER, L: INSTRUCTION REGISTER) |
| 5      | R/W     | H/L   | READ/WRITE SELECTION (H: READ, L: WRITE)                       |
| 6      | E       | H/L   | ENABLE SIGNAL FOR LCM  |
| 7-14   | DB0-DB7 | H/L   | DATA BUS LINES   |
| 15     | LEDA    | ---   | POWER SUPPLY FOR BACKLIGHT(+)                                  |
| 16     | LEDK    | ---   | POWER SUPPLY FOR BACKLIGHT(-)                                  |