

**Mechanical Data**

| Item             | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 116.0x37.0     | mm   |
| Viewing Area     | 85x18.6        | mm   |
| Dot Size         | 0.38x0.47      | mm   |
| Dot Pitch        | 0.42x0.51      | mm   |
| Mounting hole    | 108x29         | mm   |

**Absolute Maximum Rating**

| Item          | Symbol  | Standard Value |      |      | Unit |
|---------------|---------|----------------|------|------|------|
|               |         | min.           | typ. | max. |      |
| Power Supply  | VDD-VSS | 4.75           | 5    | 5.25 | V    |
| Input Voltage | VI      | 0              | ---  | VDD  | V    |

Note : VSS=0 Volt, VDD=5.0 Volt.

**Electronical Characteristics**

| Item   | Symbol | Condition        | Standard Value     |      |                    | Unit |
|--|--------|------------------|--------------------|------|--------------------|------|
|  |        |                  | min.               | typ. | max.               |      |
| Input Voltage  | VDD    | L level          | 0.7V <sub>DD</sub> | ---  | V <sub>DD</sub>    | V    |
|  | VIO    | H level          | 0                  | ---  | 0.3V <sub>DD</sub> | V    |
| Supply Current   | IDD    | VDD= +5V         | ---                | 2    | ---                | mA   |
| Recommended LC Driving Voltage for Normal Temp. Version module | Vo-Vss | -20°C            | ---                | ---  | 5.2                | V    |
|  |        | 0°C              | ---                | ---  | 4.8                |      |
|  |        | 25°C             | ---                | 4.5  | ---                |      |
|  |        | 50°C             | 4.7                | ---  | ---                |      |
|  |        | 70°C             | 3.8                | ---  | ---                |      |
| LED Forward Voltage  | VF     | 25°C             | ---                | 4.2  | 4.6                | V    |
| LED Forward Current  | IF     | 25°C             | ---                | 210  | 420                | mA   |
| EL   | IEL    | VeI=110vAC;400Hz | ---                | ---  | ---                | mA   |

**Feature**

1. Built in controller (ST7920)
2. +5V power supply
3. 1/32 duty cycle
4. LED can be driver by PIN 15, PIN16
5. Chinese Version
6. Same size with RC2002A

| Pin NO. | Symbol | Function               |
|---------|--------|------------------------|
| 1       | Vss    | GND                    |
| 2       | Vdd    | Power supply for logic |
| 3       | Vo     | NC                     |
| 4       | RS     | Register select signal |
| 5       | R/W    | H/L Read/Write signal  |
| 6       | E      | H→L Enable signal      |
| 7       | DB0    | Data bus line          |
| 8       | DB1    | Data bus line          |
| 9       | DB2    | Data bus line          |
| 10      | DB3    | Data bus line          |
| 11      | DB4    | Data bus line          |
| 12      | DB5    | Data bus line          |
| 13      | DB6    | Data bus line          |
| 14      | DB7    | Data bus line          |
| 15      | A      | Power supply for B/L + |
| 16      | K      | Power supply for B/L - |

Graphic type

**RG19232A1 Graphic 192x32 dots**

**Dimension drawing**

