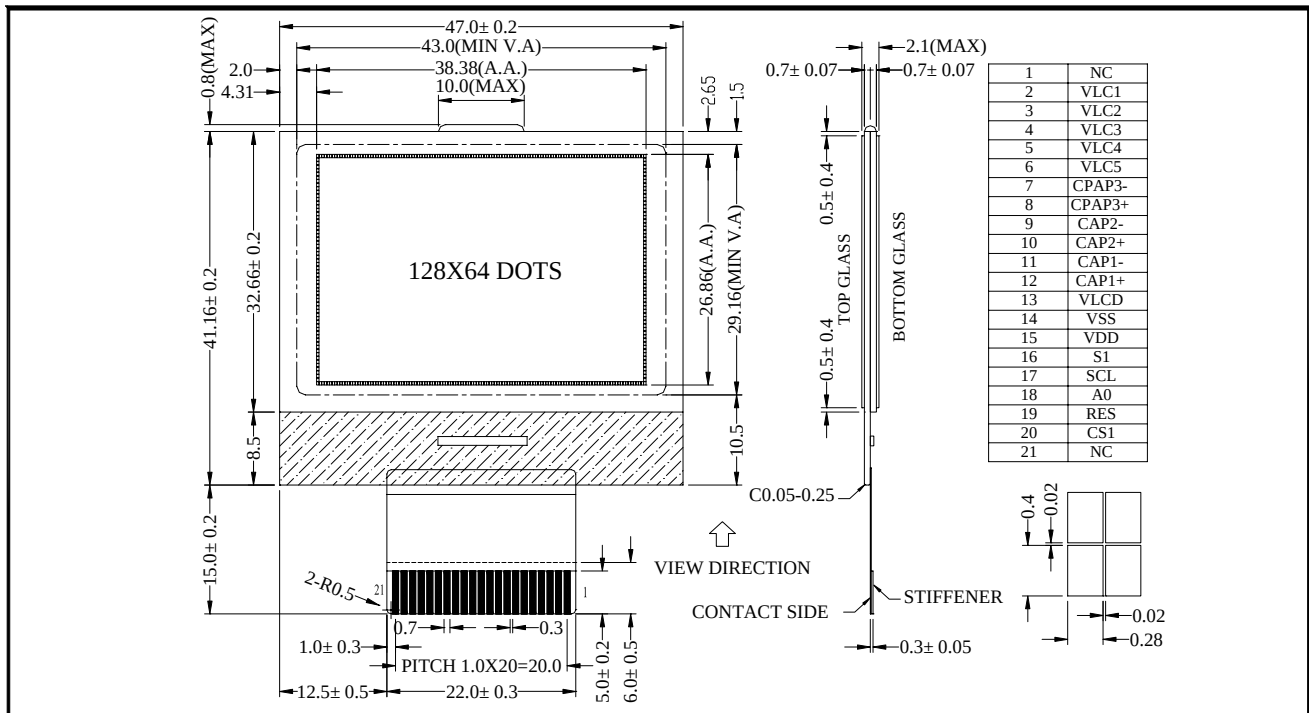


# HGO12864A

1/64DUTY 1/9BIAS



## PIN CONNECTIONS

| Pin | Symbol          | Function                                           |
|-----|-----------------|----------------------------------------------------|
| 1   | NC              | No connection                                      |
| 2   | VLC1            | LCD driver supply voltages                         |
| 3   | VLC2            |                                                    |
| 4   | VLC3            |                                                    |
| 5   | VLC4            |                                                    |
| 6   | VLC5            |                                                    |
| 7   | CAP3-           | Connect a capacitor to CAP3+                       |
| 8   | CAP3+           | Connect a capacitor to CAP3-                       |
| 9   | CAP2-           | Connect a capacitor to CAP2+                       |
| 10  | CAP2+           | Connect a capacitor to CAP2-                       |
| 11  | CAP1-           | Connect a capacitor to CAP1+                       |
| 12  | CAP1+           | Connect a capacitor to CAP1-                       |
| 13  | VLCD            | High voltage lcd supply connect a capacitor to Vss |
| 14  | V <sub>SS</sub> | GND                                                |
| 15  | V <sub>DD</sub> | +3V logic supply voltage                           |
| 16  | SI              | The serial data input terminal                     |
| 17  | SCL             | The serial clock input terminal                    |
| 18  | A0              | H: data<br>L: Instruction code                     |
| 19  | /RES            | Reset signal                                       |
| 20  | /CS1            | Chip select                                        |
| 21  | NC              | No connection                                      |

NOTES: Compatible with. VARITRONIX  
MOBI2006

## MECHANICAL DATA

| Item                    | Nominal Dimensions | Unit |
|-------------------------|--------------------|------|
| Module Size (W x H x T) | 47.0X56.16X2.1     | mm   |
| Viewing Area (W x H)    | 43.00X29.16        | mm   |
| Dot Pitch (W x H)       | 0.30X0.42          | mm   |
| Dot Size (W x H)        | 0.28X0.40          | mm   |

## ABSOLUTE MAXIMUM RATINGS

| Item                   | Symbol                           | Min. | Max.                 | Unit |
|------------------------|----------------------------------|------|----------------------|------|
| Supply Voltage (Logic) | V <sub>DD</sub> -V <sub>SS</sub> | -0.3 | 3.6                  | V    |
| Supply Voltage (LCD)   | V <sub>O</sub> -V <sub>SS</sub>  | -0.3 | 13.5                 | V    |
| Input Voltage          | V <sub>I</sub>                   | -0.3 | V <sub>DD</sub> +0.3 | V    |
| Operating Temp.        | T <sub>OPR</sub>                 | -20  | 70                   | °C   |
| Storage Temp.          | T <sub>STG</sub>                 | -30  | 80                   | °C   |

## ELECTRICAL CHARACTERISTICS (V<sub>DD</sub>=3.0V, T<sub>a</sub>=25°C)

| Item                | Symbol                          | Min.               | Typ. | Max.                | Unit |
|---------------------|---------------------------------|--------------------|------|---------------------|------|
| Input High Voltage  | V <sub>IH</sub>                 | 0.8V <sub>DD</sub> | -    | V <sub>DD</sub>     | V    |
| Input Low Voltage   | V <sub>IL</sub>                 | V <sub>SS</sub>    | -    | 0.2 V <sub>DD</sub> | V    |
| Output High Voltage | V <sub>OH</sub>                 | 0.8V <sub>DD</sub> | -    | V <sub>DD</sub>     | V    |
| Output Low Voltage  | V <sub>OL</sub>                 | V <sub>SS</sub>    | -    | 0.2 V <sub>DD</sub> | V    |
| Supply Current      | I <sub>DD</sub>                 | -                  | 400  | -                   | uA   |
| LCD Driving Voltage | V <sub>O</sub> -V <sub>SS</sub> | -                  | 8.7  | -                   | V    |

## LED BACKLIGHT SPECIFICATIONS (T<sub>a</sub>=25°C)

| Item  | Forward Voltage | Forward Current |
|-------|-----------------|-----------------|
| White | 3.0V            | 15mA            |

