VA LCD Display with 33x29 mm Display Area 22PIN Interface and Color Digits for High Contrast Applications

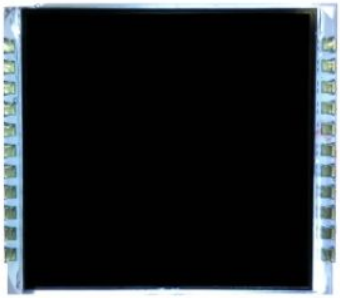
Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: BBI
- Certification: ISO90001 RoHS
- Minimum Order Quantity: 1000
- Price: 0.7-7USD
- Packaging Details: CARTON
- Delivery Time: 3-47WEEKS
- Payment Terms: T/T
- Supply Ability: 100000/MONTH

Product Specification

- Backlight Type: LED
- Polarizer Type: Transmissive
- LCD Type: Segmented Display
- Technology: LCD
- Drive Method: 1/4 Duty, 1/3 Bias
- Working Voltage: 5.0V
- VA Size: 33(W)* 29(H) Mm
- Connection Way: PIN, 22 Numbers
- Highlight: **33x29 mm Display Area VA LCD Display**, **22PIN Interface 7 Segment LCD Display**, **Color Digits VA LCD Display**



More Images

Product Description

Color Digits 7 Segment VA LCD Display 22PIN White Backlight

VA LCD Display Color Digits 7-Segment 22PIN White Backlight

Detail Information

LCD Type	VA, Negative
Viewing Angle	6 O'clock
Operating Temperature	-20~+70
LCD Drive Voltage	5.0V
Connector	PIN

VA LCD (Vertical Alignment LCD)

Features

- Liquid crystals are vertically aligned to the glass substrate in the off state, blocking light and producing deep black levels
- When voltage is applied, the crystals tilt, allowing light to pass through, creating bright and sharp visuals

Applications

- Automotive displays (e.g., dashboard panels)
- Medical devices (e.g., monitors, diagnostics equipment)
- Consumer electronics (e.g., smart home devices, appliances)
- Industrial equipment requiring high contrast and durability

Detailed Parameters

Outline Dimension	40(W)* 35(H)* 2.8(T) mm	Display mode	VA, Negative
LCD viewing area	33(W)* 29(H) mm	Polarizer type	Transmissive
Drive method	1/4 Duty, 1/3 Bias	Working voltage	5.0V
Viewing angle	6 O'clock	Connection Way	PIN, 22 numbers
Operate temperature	-20 ~+70	LED Backlight	White

VA LCD vs. FSTN LCD Comparison

Features	VA LCD	FSTN LCD
Contrast Ratio	High	Moderate to High
Viewing Angles	Wide	Moderate
Response Time	Moderate	Fast
Color Capability	Monochrome (or full color in some configurations)	Grayscale
Power Efficiency	High	Very High
Durability	High	High
Cost	Moderate	Low to Moderate
Best For	High-contrast, premium applications	Cost-sensitive, grayscale applications

Technology Overview

VA (Vertical Alignment) is a vertical orientation liquid crystal technology. Compared with TN LCD, VA LCD has higher contrast ratio and a wider viewing angle, with an angle of view reaching 178 degrees. It can effectively improve the color distortion problem of the TN layout and has features such as high contrast ratio, mild color temperature, and low light leakage.

7-segment Display

Using a 7-segment digital display structure, by controlling the on-off of 7 different stroke segments, 0-9 numbers can be combined for display. Some can also display simple characters or symbols. This display method is simple and clear, and is often used in digital display scenarios, such as electronic clocks, counters, thermometers, etc.

Backlight and Interface

White Backlight: Using white LEDs as the backlight source, white LEDs have the advantages of high brightness, low power consumption, and long lifespan. They can provide uniform backlight illumination for the display screen, making the digital display clearer and more eye-catching, and allowing the display content to be easily read even in dim light conditions.

22PIN Interface: The 22PIN interface is the channel for connecting the display screen with external circuits, used for transmitting power, control signals, and data, etc. Different pins have corresponding different functions. Through this interface, the display screen can be connected with driving circuits, microcontrollers and other devices to achieve the driving and control of the display screen.

Performance Parameters

Working Voltage: The working voltage for different models of this type of display varies. It is generally between 3.3V and 5V.

Operating Temperature: The common operating temperature range is 0 - 50 , and the storage temperature range is -10 - 60 . Some products can adapt to a wider temperature range.

Driving Method: Usually, a 1/4DUTY and 1/3BIAS driving method is adopted. This driving method can ensure the display effect while reducing power consumption and improving the stability of the display screen.

Dimensions

Screen size: It varies depending on the specific model, with different specifications such as 2.8 inches and 3 inches.

Viewing direction: The viewing direction of some products is at the 12 o'clock position, which means the display effect is best when viewed from the front.

Application Fields

Smart home appliances: Such as control panels for air conditioners, microwave ovens, ovens, etc., used to display temperature, time, working mode and other information.

Instrumentation: In electronic measuring instruments and industrial meters, used to display measurement data, parameter settings, etc.

Medical equipment: Can be applied to some simple medical instruments, such as thermometers, blood pressure monitors, etc., to facilitate the

reading of data by medical staff and patients.

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