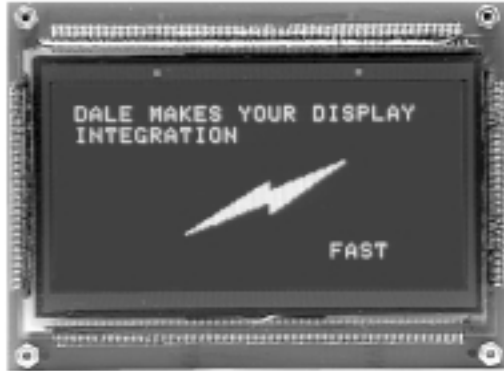# APD-192G096

Vishay Dale

VISHAY

Plasma Panel Display Modules
192 x 96 Graphics Display with Drive Electronics
Controller and Serial Interface

FEATURES

- 192 x 96 full field dot matrix
- Text or graphics modes
  (8 rows of 32 characters in text mode)
- Only + 5 VDC required
- Very compact size
- Wide Viewing angle (150°)
- Flicker free refresh
- Editing functions
- High brightness

The APD-192G096 consists of a graphics DC plasma display panel, controller and DC/DC converter.

The controller maintains all the refresh memory, character generation and control logic to enable the module to serve as a direct readout device for many applications including POS terminals, industrial controls and microprocessor instruments. Single byte, two and three byte commands allow simplified code generation, yet accomplish complex display tasking such as scrolling or inserting lines and characters. An EPROM based character generator is easily configured for any character set, but comes standard with three variations of international fonts (Standard International, International plus Kata-kana and International plus Russian) and 128 block graphics characters. Alternate character sets can be factory or user programmed. The pixel pattern in text mode is 5 x 7 pixels in an 6 x 12 block. Two means of using graphics are supported. The first is character graphics, in which the user sends the proper ASCII code to select the desired graphics character. The character graphics mode allows easy mixing of text and graphics images. The second is the bit plot mode (using set and reset commands) which allows any graphic pattern to be drawn a bit at a time. Character entry in bit mode allows for 5 x 7 ASCII characters to be placed at any given pixel location within the pixel map. A FIFO buffer is used to capture incoming data in the event the display's microprocessor is busy with a length command. Handshaking is suggested when operating in the graphics mode. The data format is 1 start bit, 8 data bits and 1 stop bit.
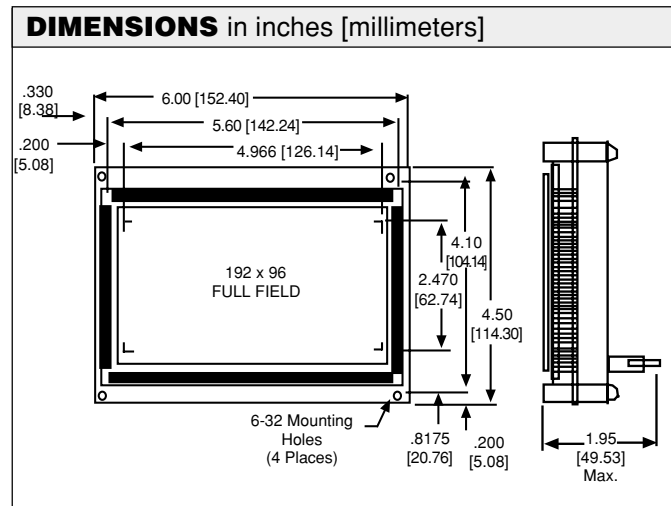
OPTICAL SPECIFICATIONS

Viewing Area: 4.966" [126.14mm] W x 2.470" [62.74mm] H.

Pixel Size: 0.017" [0.43mm] square.

Pixel Pitch: 0.026" [0.66mm].

Luminance: 70 foot lamberts.

STANDARD ELECTRICAL SPECIFICATIONS

	MIN.	TYP.	MAX.	UNITS
Supply Voltage	4.75	5.0	5.25	V
Supply Current	—	1.0	2.5	A

DIMENSIONS in inches [millimeters]

ORDERING INFORMATION

DESCRIPTION	PART NUMBER
Display, Drive Electronics and Controller	APD-192G096
Mating Connector	280105-02
Non-Glare Filter (amber circular polarized) - other filters available, contact factory	280109-16