APD-256M025A-1

Vishay Dale

Plasma Panel Display Modules
256 Character Display with Drive Electronics
Controller, Parallel and Serial Interface

VISHAY

FEATURES
- 256 (8 x 32) alphanumeric characters (5 x 7 dot matrix)
- Only + 5 and + 12 VDC required
- 256 International character set (includes ASCII characters). (Optional character sets available.)
- Parallel interface
- Serial interface (RS-232 or TTL)
- Wide viewing angle (150°)
- Rugged design/slim profile
- Flicker free refresh, high speed data input
- High brightness

The APD-256M025A-1 plasma display module consists of a multiplexed DC plasma display, driver circuitry and a microprocessor-based controller board. Vishay Dale's® patented open construction display technology assures a stable, flicker free screen.

The parallel interface is a basic 8 bit parallel ASCII interface with handshaking and some dedicated control lines. The ASCII data and command data are presented to the unit in positive logic convention. Data is entered by first placing the data to be strobed into the display on the data bus. A negative going strobe of 200 nS on the WRITE pin will notify the controller that data is available. The controller will respond with a positive going BUSY signal that will remain a logic one until the controller is ready. The system microprocessor handles input data rates up to 10 kHz. Data format for serial interface is 1 start bit, 8 data bits and 1 stop bit. Baud rates from 150 to 19,200 can be selected. The serial interface can be programmed for RS-232 or TTL voltage levels. The display can operate with no handshaking at the highest baud rate, as it has a 20 character buffer to capture data while doing long commands. However, it is important to note instruction execution times to prevent loss of data in the event that several long commands are placed in sequence. The EPROM based character generator is programmed with an international character set which includes the standard ASCII characters. It can be factory or user programmed for other character sets. The logic input is one HCT type input with a 4.75 kilohm to + 5 VDC. The output is driven from a 74LS06 open collector gate and is not internally pulled up.

OPTICAL SPECIFICATIONS

Viewing Area: 7.00" [177.80mm] W x 3.05" [77.47mm] H.

Number of Characters: 256.

Character Size: 0.146" [3.71mm] W x 0.252" [6.40mm] H.

Luminance: 70 foot lamberts.

DIMENSIONS in inches [millimeteres]

6-32 Threaded Standoff 4 Places

J1 Mating Connector AMP 1-480702-0 (18-24 AWG Pin) 350689-1

J2 Mating Connector AMP 746285-4

Pin #1

STANDARD ELECTRICAL SPECIFICATIONS

	MIN.	TYP.	MAX.	UNITS
Logic Supply Voltage	+ 4.75	+ 5.0	+ 5.25	V
Logic Supply Current	—	0.45	—	A
Panel Supply Voltage	+ 11.4	12.0	12.6	V
Panel Supply Current	—	0.6	1.0	A
Logic One Voltage	2.4	—	5.5	V
Logic Zero Voltage	—	—	0.8	V
Logic Zero Input Current	—	—	- 0.4	mA
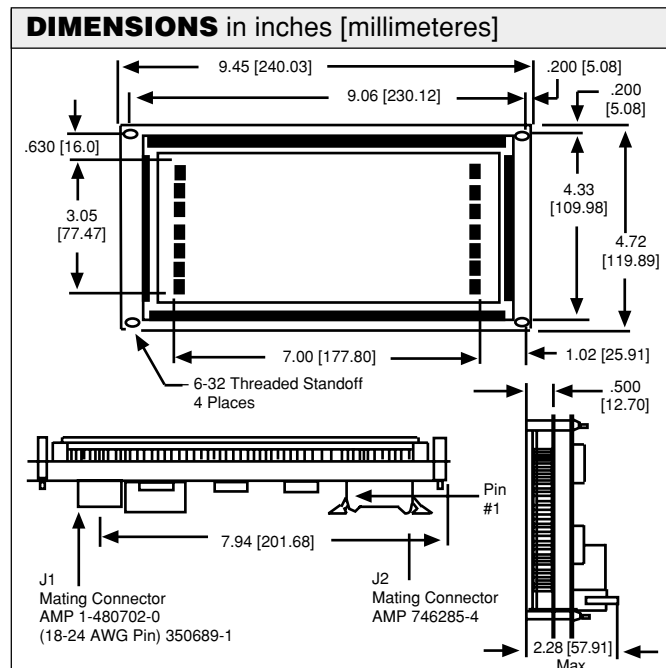
ORDERING INFORMATION

DESCRIPTION	PART NUMBER
Display, Drive Electronics and Controller	APD-256M025A-1
Parallel Data Connector Kit	280105-04
Power/Serial Data Connector Kit	280108-06
Non-Glare Filter (amber circular polarized) - other filters available, contact factory	280109-14

Disclaimer

All product specifications and data are subject to change without notice.

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