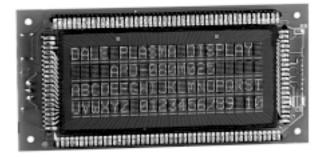
Vishay Dale

Plasma Panel Display Modules

80 Character Display with Drive Electronics Controller and Serial Interface



The APD-080M025-1 plasma display module consists of a multiplexed DC plasma display, drive circuitry and switching voltage converter mated with an intelligent, microprocessorbased controller board. The resulting assembly interfaces easily to microprocessor based systems and only requires readily available low voltages for power. Vishay Dale's patented open construction display technology assures a stable flicker free screen even at highest communication rates.

Interfacing is very simple (and requires no handshaking as a 20 byte FIFO buffer captures data when the display is busy) through a single 3 pin connector that has + 5 VDC, SERIAL (RS-232) DATA and GROUND connections.

An EPROM based character generator is factory programmed with 96 ASCII characters. Alternate character sets can be user or factory programmed.

Serial data protocol is 1 start bit, 8 data bits and no stop bit. Baud rate (300, 1200 or 9600) is selected with a control board jumper. A simplified command set allows quick and efficient code generation.

OPTICAL SPECIFICATIONS

Viewing Area: 4.03" [102.36mm] W x 1.46" [37.08mm] H. Number of Characters: 80.

Character Size: 0.150" [3.81mm] W x 0.250" [6.35mm] H. Luminance: 80 foot lamberts.

Viewing Angle: 150° cone.

FEATURES

- 80 (4 x 20) alphanumeric characters (5 x 7 dot matrix) plus underbar
- Only + 5 VDC required
- · ASCII character set (optional character sets available)
- Efficient serial interface (RS-232)
- Wide viewing angle (150°)
- High brightness
- Rugged design/slim profile
- · Flicker free refresh, high speed data input

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | | |
|------------------------------------|--------|-------|--------|-------|--|--|--|--|
| | MIN. | TYP. | MAX. | UNITS | | | | |
| Panel Supply Voltage | + 4.75 | + 5.0 | + 5.25 | V | | | | |
| Panel Supply Current | — | 0.3 | 1.0 | А | | | | |

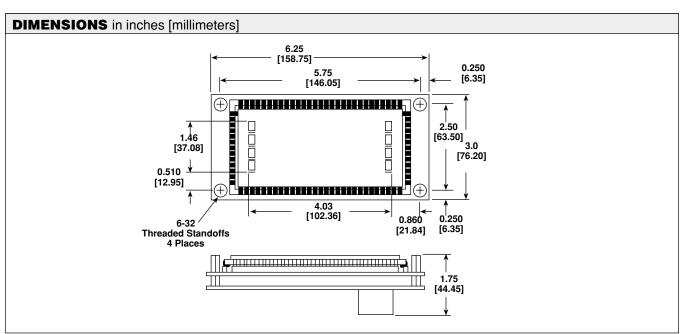
| ASCII CHARACTER SET | | | | | | | | | |
|---------------------|----|----|----|----|----|-----|--|--|--|
| | 32 | 48 | 64 | 80 | 96 | 112 | | | |
| 0 | SP | 0 | @ | Р | " | р | | | |
| 1 | ! | 1 | A | Q | а | q | | | |
| 2 | " | 2 | В | R | b | r | | | |
| 3 | # | 3 | С | S | с | S | | | |
| 4 | \$ | 4 | D | Т | d | t | | | |
| 5 | % | 5 | E | U | е | u | | | |
| 6 | & | 6 | F | V | f | v | | | |
| 7 | " | 7 | G | W | g | w | | | |
| 8 | (| 8 | Н | Х | h | х | | | |
| 9 |) | 9 | I | Y | i | У | | | |
| 10 | * | : | J | Z | j | Z | | | |
| 11 | + | ; | К | [| k | { | | | |
| 12 | , | < | L | ١ | I | | | | |
| 13 | - | = | М |] | m | } | | | |
| 14 | | > | N | ۸ | n | ~ | | | |
| 15 | / | ? | 0 | _ | 0 | | | | |

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APD-080M025-1

Vishay Dale



ORDERING INFORMATION

| DESCRIPTION | PART NUMBER |
|---|---------------|
| Display, Drive Electronics and Controller | APD-080M025-1 |
| Mating Connector Kit | |
| Non-Glare Filter (amber circular polarized) - other filters available - contact factory | |



Vishay

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