APD-128G064A-1

Vishay Dale

Plasma Display Modules

128 x 64 Graphics Display with Drive Electronics,
TTL Level Data Interface and DC to DC Converter



FEATURES

- TTL level video interface
- Highly visible for long distance viewing
- On board DC converter
- Slim profile
- Large, bright characters and graphics

The APD-128G064A-1 DC plasma display offers viewing qualities designers seek such as high contrast, viewing angle of 150° minimum and long distance readability. Its bright (50 foot lambert minimum) with characters and graphics figures presented in a pleasing neon orange color against a black background. Plasma is much more readable and eye-pleasing than liquid crystal or vacuum fluorescent displays and is filterable to red, amber or neutral density.These plasma display panels are driven in a standard row-column refresh method much like a CRT display.

The designer need only supply TTL level signals for SERIAL DATA, DOT CLOCK, COLUMN LATCH, ROW DATA, ROW CLOCK and DISPLAY ENABLE. The SERIAL DATA is entered with the DOT CLOCK up to frequencies as high as 8mHz. After a row of 128 pixels is clocked in, the COLUMN LATCH signal is toggled and the data is latched. At the time the data is latched, the display is briefly disabled using the DISPLAY ENABLE signal, then the row pointer is advanced with the ROW CLOCK signal. Once each frame the ROW DATA must be asserted to synchronize the column serial data with the beginning row. The recommended scanning frequency is approximately 70 Hz, but may be as high as 200 Hz. The high clock rate on the data clock allows for rapid refresh and maximum access time to the refresh ram.

ELECTRICAL SPECIFICATIONS

Power Required: Typical = 12 watts.

Maximum = 35 watts.

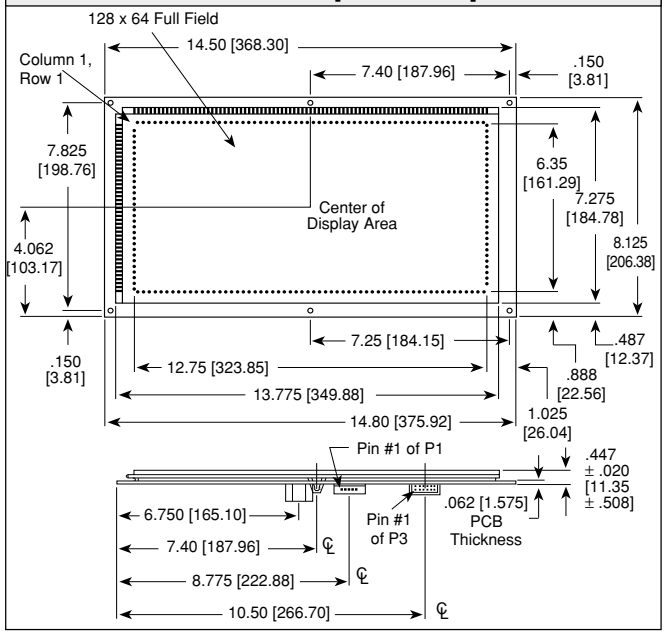
STANDARD ELECTRICAL SPECIFICATIONS*

DESCRIPTION	SYMBOL	MIN.	TYP.	MAX.	UNITS
Logic Supply	V_{cc}	+ 4.5	+ 5.0	+ 5.5	VDC
Logic Current	I_{cc}	—	0.050	—	Amps
DC-DC Supply	VDC	+ 12.0	+ 24.0	+ 30.0	VDC
DC-DC Current**	I_{dc}	0.080	0.750	1.5	Amps
Logic 1 Input	V_{ih}	2.0	—	—	VDC
Logic 0 Input	V_{il}	—	—	0.8	VDC

*Recommended operating voltages. All maximums are to be considered absolute maximum.

**Current is calculated at VDC = 24 VDC. The initial power on condition may require 2X maximum rating to initiate DC voltage conversion circuit.

DIMENSIONS in inches [millimeters]



ORDERING INFORMATION

DESCRIPTION	PART NUMBER
Display Module with Drivers and TTL Interface	APD-128G064A
Display Module with Drivers, TTL Interface and On Board DC Converter	APD-128G064A-1
Data Connector Kit	280105-05
Power Connector Kit	280108-13

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