

12.1" WXGA LED BACKLIT TFT LCD DISPLAY

Sunlight Readability/1000:1 Dimming/Cool Operation

GENERAL DESCRIPTION

The ACD-2550 consists of the CMO G121I1-L01 12.1" WXGA TFT LCD Display modified with a high-performance LED backlight.

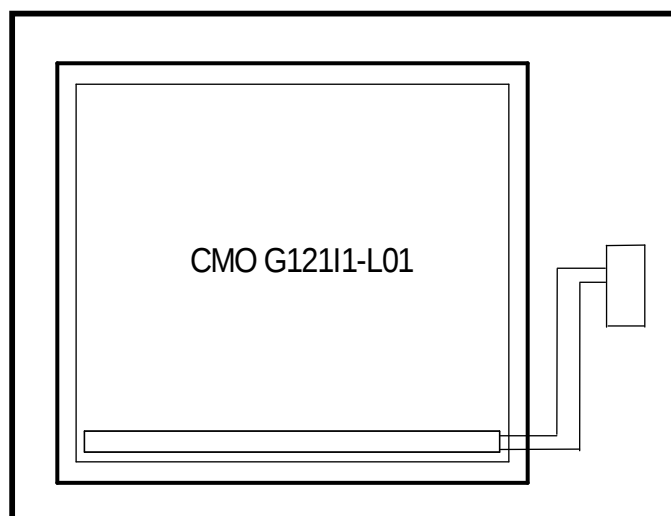
Customer Consigned Panel

Performance at given brightness level

1200 cd/m² with 19.6 Watts LED Power

Display outline identical to standard LED equipped panel.

For many applications, satisfies sunlight readability goals.



LCD PANEL HIGHLIGHTS

12.1" TFT LCD Module

WXGA 1280(H) x 800(V)

Active Area: 261.12 mm(H) x 163.2mm(V)

262K/16.2M colors

LVDS Electrical Interface

Contrast Ratio 1000:1 Typical

Display Mode Normally Black

Surface Treatment: Anti-Glare, 3H hard coating

RoHS Compliant

For complete LCD specifications (standard panel), refer to CMO datasheet G121I1-L01

LED BACKLIGHT FEATURES

White LED edge-light Flex rail.

Single connector connection, allows easy interconnect with LED driver.

Projected lifetime > 75,000 hours

Active fault protection keeps remaining LEDs operating normally, if one should ever fail.

1000:1 or better dimming ratio, guaranteed.

1 For best power transfer and control, use ACI-E105280-1942 driver. Do not set the driver output current (Ifwd) higher than the value specified in the Maximum Ratings table of this document. Please contact the factory for more specific use LED driver solutions if required.

MAXIMUM RATINGS*

Symbol	Parameter	Value	Unit
Top	Operating Temperature of Display (Center of Display Surface)	-10 to +70	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-30 to +85	°C
Tstg	Display Storage Temperature	-20 to +80	°C
Ifwd	LED Forward Current	112	mADC

*Maximum Ratings are those values beyond which damage may occur.

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 93.3mA per bank, LED rail ACR-0683-2510, 3 banks per rail, 1 rail per display, Ta = +25Deg-C, LCD powered

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness		1080	1200	1320	cd/m ²
X	White X Coordinate			0.265		-
Y	White Y Coordinate			0.301		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 93.3mA per bank, 3 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Nom	Max	Unit
Vfwd	LED Rail Forward Voltage Drop		63	70	77	VDC

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

