

8.4" SVGA LED BACKLIT TFT LCD DISPLAY

Sunlight Readability/Cool Operation

GENERAL DESCRIPTION

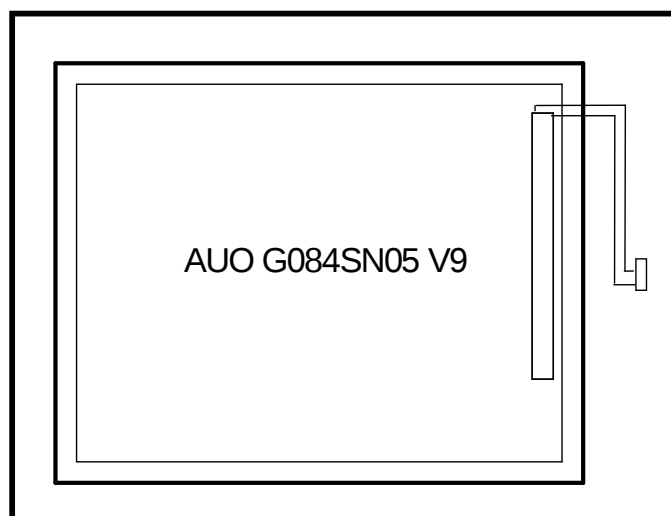
The ACD-AU084-2186 consists of the AUO G084SN05 V.9 8.4" SVGA TFT LCD Display modified with a high-performance LED backlight. The resulting performance exceeds that of the standard CCFL equipped backlight by 2.2 to 1.

Performance at given brightness level

900 cd/m² with 4.4 Watts LED Power

Display outline identical to standard CCFL equipped panel.

For many applications, satisfies sunlight readability goals.



LCD PANEL HIGHLIGHTS

8.4" TFT LCD Module

SVGA 800(H) x 600(V)

Active Area: 170.4mm(H) x 127.8mm(V)

262k colors (RGB 6-bits data driver)

LVDS Electrical Interface

Contrast Ratio 600:1 Typical

Display Mode Normally White

Surface Treatment: Anti-Glare, Hardness 3H

RoHS Compliant

For complete LCD specifications (standard panel), refer to AUO datasheet G084SN05 V.9.

LED BACKLIGHT FEATURES

White LED edge-light rail.

Single connector connection (Typically 8 inches in length), 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-C150080-1968 LED 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)	-30 to +85	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-30 to +85	°C
Tstg	Display Storage Temperature	-30 to +85	°C
Ifwd	LED Forward Current	96	mADC

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

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 80mA Rail (ACR-0551-2183). One Rail per Display. Ta = +25°C, LCD un-powered.

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness	After 1 hour stabilization	810	900	990	cd/m ²
X	White X Coordinate			0.295		-
Y	White Y Coordinate			0.346		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 80mA Rail (ACR-0551-2183). One Rail per Display. Top = +25°C

Symbol	Parameter	Test Conditions	Min	Nom	Max	Unit
Vfwd	LED Rail Forward Voltage Drop		50	55	60	VDC

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

