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ACD-2401

PRODUCT DATA SHEET

10/23/13

10.4" SVGA LED BACKLIT TFT LCD DISPLAY

Sunlight Readability/1000:1 Dimming/Cool Operation

GENERAL DESCRIPTION

The ACD-2401 consists of the LG LB104S04-TL01 SVGA TFT LCD Display modified with a high-performance LED backlight. The resulting performance exceeds that of the standard LED equipped backlight by 1.3 to 1.

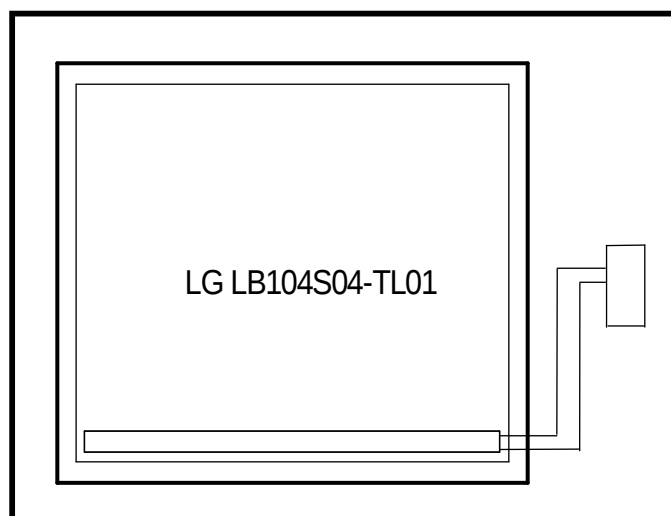
Customer Consigned Panel

Performance at given brightness level

1000 cd/m² with 7.8 Watts LED Power

Display outline identical to standard LED equipped panel.

For many applications, satisfies sunlight readability goals.



LCD PANEL HIGHLIGHTS

10.4" TFT LCD Module

SVGA 800(H) x 600(V)

Active Area: 211.2mm(H) x 158.4mm(V)

262,144 colors (RGB 6-bits data driver)

LVDS Electrical Interface

Contrast Ratio 500:1 Typical

Display Mode: Normally White

Surface Treatment: Anti-Glare; Hard Coating(3H)

RoHS Compliant

For complete LCD specifications (standard panel), refer to LG LB104S04-TL01 datasheet.

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-1865 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 +50	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-30 to +85	°C
Tstg	Display Storage Temperature	-20 to +60	°C
Ifwd	LED Forward Current	88	mADC

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

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 80mA per bank, LED rail ACR-0971-2342, 1 bank per rail, 1 rail per display, Ta = +25Deg-C, LCD unpowered

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness		900	1000	1100	cd/m ²
X	White X Coordinate			0.274		-
Y	White Y Coordinate			0.328		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 80mA per bank, 1 bank per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Nom	Max	Unit
Vfwd	LED Rail Forward Voltage Drop		87	97	107	VDC

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

