

10.4" XGA LED BACKLIT TFT LCD DISPLAY

Sunlight Readability/1000:1 Dimming/Cool Operation

GENERAL DESCRIPTION

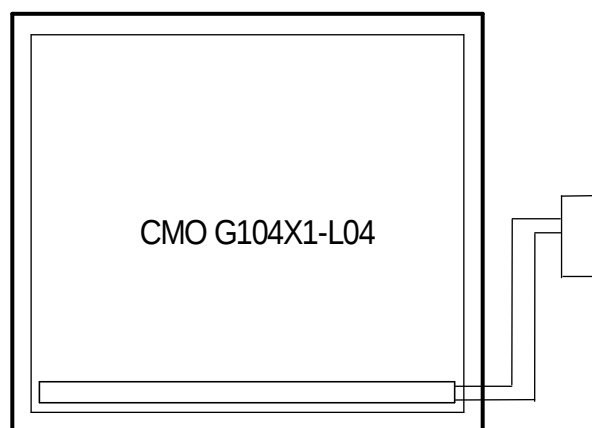
The ACD-CH104-2380 consists of the CMO G104X1-L04 10.4" XGA TFT LCD Display modified with a high-performance LED backlight.

Performance at given brightness level

1000 cd/m² with 11.7 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

XGA 1024(H) x 768(V)

Active Area: 210.4mm(H) x 157.8mm(V)

16.2 colors (RGB 8-bits data driver)

LVDS Electrical Interface

Contrast Ratio 1200:1 Typical

Display Mode Normally Black

Surface Treatment: Anti-Glare

RoHS Compliant

For complete LCD specifications (standard panel), refer to CMO datasheet G104X1-L04

LED BACKLIGHT FEATURES

White LED edge-light Flex rail.

Two wire connection (Typically 11 inches long), allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

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 ¹	Operating Temperature of Display (Center of Display Surface)	-30 to +70	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-30 to +85	°C
Tstg ¹	Display Storage Temperature	-30 to +80	°C
Ifwd	LED Forward Current	144	mADC

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

¹ Per Manufacture's Specification

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 120mA per bank, LED rail ACR-0971-2374, 1 bank per rail, 1 rail per display, Ta = +25Deg-C, moving air (36.0 CFM), min 2hr soak

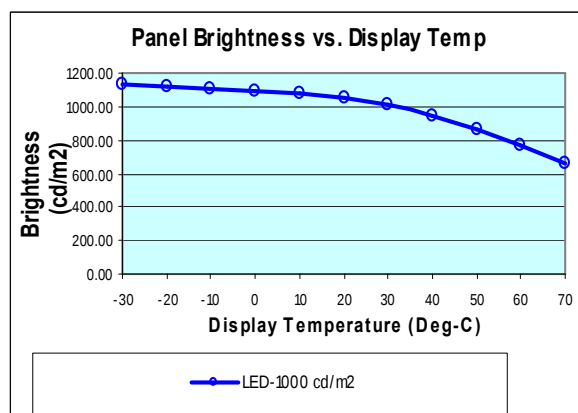
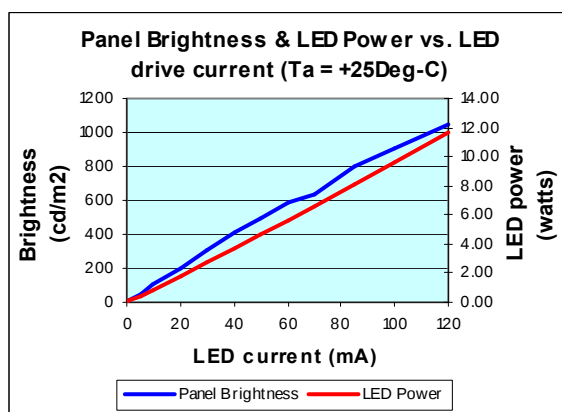
Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness		900	1000	1100	cd/m ²
X	White X Coordinate			0.282		-
Y	White Y Coordinate			0.324		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 120mA 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



² Moving air (36.0 CFM)