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ACD-NC121-1862

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12.1" SVGA LED BACKLIT TFT DISPLAY

Sunlight Readability/Cool operation

GENERAL DESCRIPTION

The ACD-NC121-1862 consists of the NEC NL8060BC31-41C SVGA TFT display modified with a high performance LED backlight. The resulting performance exceeds that of the standard CCFL equipped backlight by 2.8 to 1

Performance at given brightness level

1050 cd/m² with 5.8 watts LED power

Display outline identical to standard CCFL equipped panel

For many applications, satisfies sunlight readability goals

03/17/10



LCD PANEL HIGHLIGHTS

12.1" TFT Active Matrix Color

246.0 (H) mm x 184.5 (V) mm viewable area

SVGA 800 x 600 pixels, 262,144 or 16,777,216 colors

600:1 typical contrast ratio

40% color gamut (NTSC color space)

For complete LCD specification (standard panel), refer to NEC datasheet NL8060BC31-41C

LED BACKLIGHT FEATURES

White LED edge-light rail

Two wire connection (Typically 8 inches long), allows simple interconnect with LED driver

Projected lifetime > 75,000 hours

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

5000:1 or better dimming ratio guaranteed

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MAXIMUM RATINGS*

Symbol	Parameter	Value	Unit
Top	Operating temperature of display (center of panel surface)	-20 to +70	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-20 to +75	Deg-C
Tstg	Display storage temperature	-30 to +80	Deg-C
Ifwd	Maximum LED edge-light forward current (DC)	125	mA

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

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 41mA x 2 Banks (LED rail ACR-0702-1871), Ta = +25Deg-C, LCD un-powered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		945	1050	1155	cd/m ²
X	White X coordinate			0.321		-
Y	White Y coordinate			0.398		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 41mA x 2 Banks, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		63	70	77	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

