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ACD-NC121-1767

PRODUCT DATA SHEET – PAGE 1 OF 2

12.1" SVGA LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

The ACD-NC121-1767 consists of the NEC NL8060BC31-27 SVGA TFT display modified with a high performance LED backlight. The resulting performance exceeds that of the standard CCFL equipped backlight by 1.7 to 1

Performance at given brightness levels

1425 cd/m² with 11.8 watts LED power

Display outline identical to standard CCFL equipped panel

For many applications, satisfies sunlight readability goals

9/22/08



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 colors

600:1 typical contrast ratio

40% color gamut (NTSC color space)

For complete LCD specification (standard panel), refer to NEC datasheet NL8060BC31-27

LED BACKLIGHT FEATURES

White LED edge-light rail

Two wire connection (Typically 8 inches long), allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

Active fault protection keeps remaining LED's operating normally if one should ever fail

10000:1 or better dimming ratio, guaranteed¹

¹ For best power transfer and control, use the ACI-C120125-1852 LED driver. Do not set the driver output current (Ifwd) higher than the value specified in the Maximum Ratings table of this document.

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MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
Top	Operating temperature of display (center of panel surface)	-10 to +70	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-20 to +75	Deg-C
Tstg	Display storage temperature	-20 to +80	Deg-C
Ifwd	Maximum LED edge-light forward current (DC)	130	mA

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 125mA (LED rail ACR-0951-1798), Ta = +25Deg-C, LCD un-powered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		1282	1425	1568	cd/m ²
X	White X coordinate			0.321		-
Y	White Y coordinate			0.377		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 125mA, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		85	95	105	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

