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ACD-OP150-2385

PRELIMINARY DATA SHEET – PAGE 1 OF 2

15.0" XGA LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

The ACD-OP150-2385 consists of the Optrex T-51863D150J-FW-A-AFN XGA TFT display modified with a high performance LED backlight. The resulting performance exceeds that of the standard CCFL equipped backlight by TBD to 1

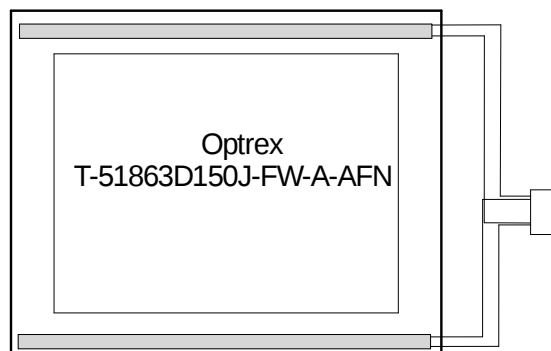
Performance at given brightness levels

1500 cd/m² with 11.9 watts LED power

Display outline identical to standard CCFL equipped panel

For many applications, satisfies sunlight readability goals

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LED BACKLIGHT FEATURES

White LED edge-light 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, guaranteed¹

¹ For best power transfer and control, use ACI-C095160-2364 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.

LCD PANEL HIGHLIGHTS

15.0" TFT Active Matrix Color

304.1 (H) mm x 228.1 (V) mm viewable area

XGA 1024 x 768 pixels

16.7M colors

600:1 typical contrast ratio

For complete LCD specification (standard panel), refer to Optrex datasheet T-51863D150J-FW-A-AFN

MAXIMUM RATINGS*

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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)	-30 to +80	Deg-C
Tstg	Display storage temperature	-20 to +80	Deg-C
Ifwd	LED forward current (DC)	64	mA

*Maximum Ratings are those values beyond which damage may occur

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 53.3mA per LED bank, (LED rail ACR-0803-2050, 3 banks per rail, 1 rail per display), Ta = +25Deg-C, LCD un-powered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		1350	1500	1650	cd/m ²
X	White X coordinate			0.289		-
Y	White Y coordinate			0.353		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 53.3mA per LED bank, 3 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		68	75	82	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

