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ACD-2459

PRODUCT DATA SHEET – PAGE 1 OF 2

15.6" FHD LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

The ACD-2459 consists of the Sharp LQ156M1LG21 FHD TFT display modified with a high performance LED backlight.

Customer Consigned Panel

Performance at given brightness levels

1000 cd/m² with 22.3 watts LED power

Display outline identical to standard LED equipped panel

For many applications, satisfies sunlight readability goals

03/04/2015



LCD PANEL HIGHLIGHTS

15.6" TFT Active Matrix Color

344.16 (H) mm x 193.59 (V) mm viewable area

FHD 1920 x 1080 pixels

16.2M colors

800:1 typical contrast ratio

Aspect Ratio: 16:9

Display Mode: Normally White

Surface Treatment: Anti-glare; Hard-Coating 3H

For complete LCD specification (standard panel), refer to Sharp datasheet LQ156M1LG21

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-E090330-2051 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.

MAXIMUM RATINGS*

03/04/2015

Symbol	Parameter	Value	Unit
Top	Operating temperature of display (center of panel surface)	0 to +70	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-30 to +80	Deg-C
Tstg	Display storage temperature	-30 to +70	Deg-C
Ifwd	LED forward current (DC)	99.0	mA

*Maximum Ratings are those values beyond which damage may occur

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 82.5mA per bank, (LED rail ACR-0684-2456, 4 banks per rail, 1 rail per display), Ta = +25Deg-C, LCD un-powered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		900	1000	1200	cd/m ²
X	White X coordinate			0.253		-
Y	White Y coordinate			0.271		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 82.5mA per LED bank, 4 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		61	68	75	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

