

10.6" WXGA LED BACKLIT TFT DISPLAY WITH NVIS CLASS B CAPABILITY

GENERAL DESCRIPTION

The ACD-2484 consists of the Mitsubishi AA106TA11 WXGA TFT display modified with a high performance LED backlight capable of Day and NVIS full color operation.

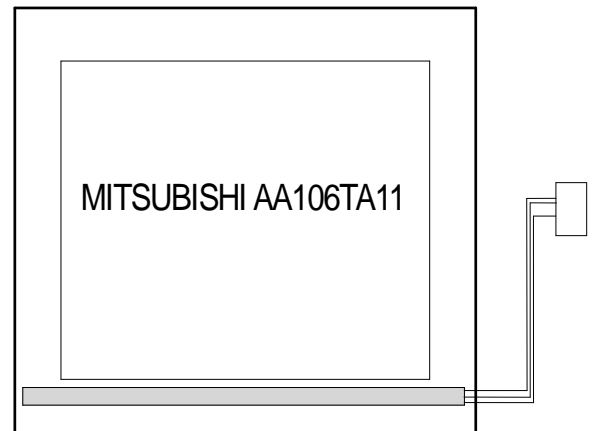
Customer Consigned Panel

Performance at given brightness levels

1000 cd/m² with 14.1 watts LED power (Day)

3.7 cd/m² with 3.1 watts LED power (NVIS)

08/27/2014



LCD PANEL HIGHLIGHTS

10.6" TFT Active Matrix Color

231.36 (H) mm x 138.816 (V) mm viewable area

WXGA 1280 x 768 pixels

16.7 M (8 bit/color) 262K (6 bit/color)

1000:1 typical contrast ratio

Display Mode Normally Black

RoHs compliant

For complete LCD specification (standard panel), refer to the Mitsubishi AA106TA11 datasheet

LED BACKLIGHT FEATURES

White and NVIS LED edge-light rail

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

Projected lifetime > 75,000 hours

50,000:1 or better dimming ratio (Day)¹

Minimum NVIS intensity equal to 0.003 cd/m² or less¹

¹ For best power transfer and control, use one ACI-2485 Dual Mode Driver.

MAXIMUM RATINGS

08/27/2014

Symbol	Parameter	Value	Unit
Top	Operating temperature of display (center of panel surface)	-30 to +80	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-40 to +85	Deg-C
Tstg	Display storage temperature	-30 to +80	Deg-C
Ifwd	LED forward current (Day)	96	mA
Ifwd	LED forward current (NVIS)	38.5	mA

*Maximum Ratings are those values beyond which damage may occur

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd(Day) = 80mA per bank, 2 banks per rail, 1 rail per display, Ifwd(NVIS) = 35mA per bank, 1 bank per rail, 1 rail per display LED rail: ACR-2475, Ta = +25Deg-C, LCD powered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bpd	Panel Brightness (Day)		900	1000	1100	cd/m ²
Bpn	Panel Brightness (NVIS)		3.4	3.7	4.0	cd/m ²
Xd	White X coordinate (Day mode)			0.305		-
Yd	White Y coordinate (Day mode)			0.362		-
XN	White X coordinate (NVIS)			0.280		-
YN	White Y coordinate (NVIS)			0.480		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

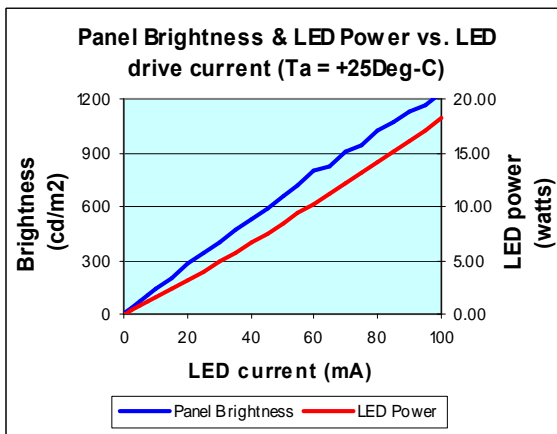
Ifwd(Day) = 80mA, Ifwd(NVIS) = 35mA, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop (Day mode)		79	88	97	Vdc
Vfwd	LED rail forward voltage drop (NVIS)		80	89	98	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

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Day mode



NVIS

