



Endicott Research Group, Inc.

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G4231F



Specifications and Applications Information

11/27/12

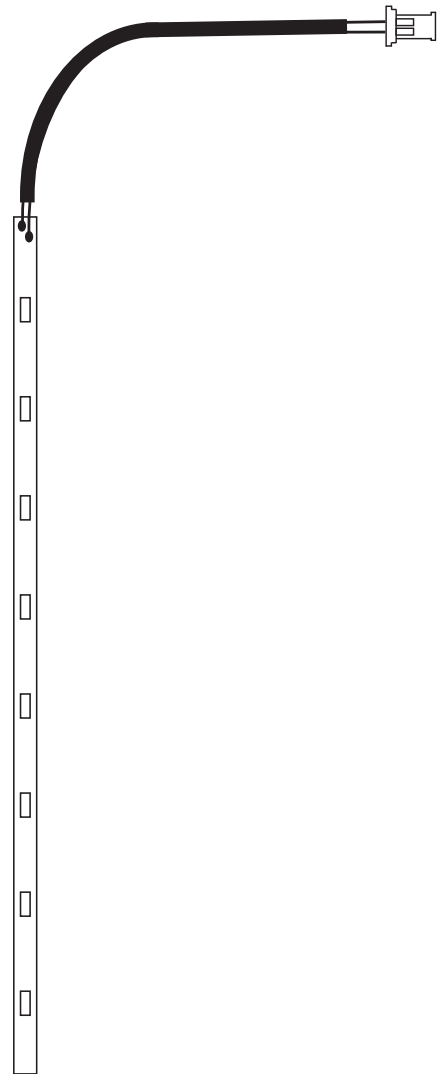
LED Backlight Unit

The ERG G4231F LED backlight unit is specifically designed for applications which require wide dimming and LCD brightness stability. The G4231F is designed to provide a backlight for the AU Optronics G065VN01 display.

Designed, manufactured and supported within the USA, the G4231F features:

- ✓ Custom LED stick for Customer supplied rail
- ✓ High dimming ratio
- ✓ One year warranty

Package Configuration

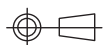


Components are shown for reference only. Actual product may differ from that shown.

Connector
Input Connector

Molex 51146-0200

J1-1 Cathode 1
J1-2 Anode 1





Absolute Maximum Ratings

Rating	Symbol	Value	Units
Forward Current ⁽¹⁾	I_F	200	mA
Component Surface Temperature	T_s	-40 to +100	°C
Storage Temperature	T_{stg}	-40 to +100	°C

Maximum Recommended Operating Conditions ⁽²⁾

Rating	Symbol	Value	Units
Forward Current ⁽³⁾	I_F	150	mA
Component Surface Temperature	T_s	-40 to +95	°C

Electrical Characteristics

Unless otherwise noted $I_F = 100$ mA dc and $T_a = 25^\circ\text{C}$

Characteristic	Symbol	Min	Typ	Max	Units
Number of Strings	-	-	1	-	-
LED Forward Voltage	V_F	2.8	3.0	3.4	V
String voltage	V_S	22.4	24.0	27.2	V

Specifications subject to change without notice.

- (1) Current is specified per string.
- (2) Operation above maximum recommended operating conditions will require additional thermal management actions and will decrease LED lifetime.
- (3) Strings are to be driven with a current source.



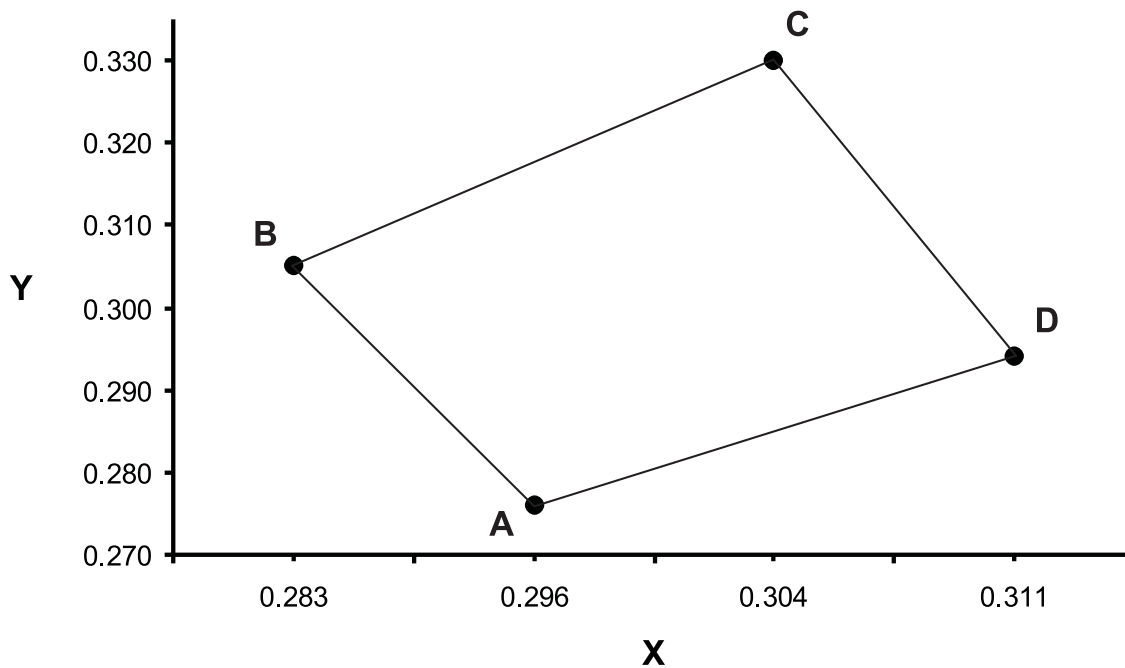
Backlight Chromaticity Coordinate Boundaries ⁽¹⁾

(Ta = 25°C)

	A	B	C	D
X	0.296	0.283	0.304	0.311
Y	0.276	0.305	0.330	0.294

(1) Each column (A, B, C and D) represents an X,Y coordinate on the CIE 1931 chromaticity diagram.

CIE 1931 CHROMATICITY DIAGRAM





J1 pins:

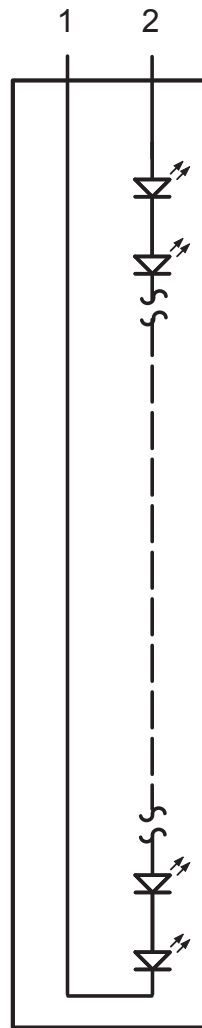


Figure 1

SFR Connectivity



Endicott Research Group, Inc. (ERG) reserves the right to make changes in circuit design and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by ERG is believed to be accurate and reliable. However, no responsibility is assumed by ERG for its use.