

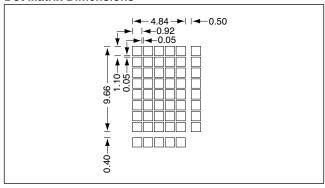


Features

· RoHS Compliant

- AND471GST: Super Twist Technology
- · AND471GST-LED: STN with LED backlight
- · Low voltage, +5V single power supply
- · Controller on board (HD44780)
- · RoHS compliant
- · Wide temperature range option (WGST)

Dot Matrix Dimensions



Mechanical Characteristics

Item	Specification	Unit
Outline Dimensions	122 (W) x 44 (H) x 11 (D)	mm
Character size	4.84 (W) x 9.66 (H)	mm
Viewing Area	99.0 (W) x 24.0 (H)	mm
Dot Size	0.92 (W) x 1.10 (H)	mm
Dot Pitch	0.98 (W) x 1.16 (H)	mm

Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Supply Voltage	V_{DD}	7.0	٧
Input Voltage	V _{IN}	$0 \le V_{IN} \le V_{DD}$	٧
LED Forward Current	I _F	480	mA

AND471GST/GST-LED

2 Lines x 16 Characters Intelligent Character Display

The AND471GST/GST-LED devices are compact, LCD modules that have an on-board LCD controller and driver circuit. These devices can display 160 characters (numerals, letters, symbols and Kana letters), as well as eight custom characters. The large characters provide excellen readability.

Absolute Maximum Ratings (Continued)

Item	Symbol	Rating	Unit
LED Reverse Voltage	V_R	8	٧
LED Power Dissipation	P _D	2000	mW
Operating Temperature	T _{op}	0 to +50	°C
Storage Temperature	T _{stg}	-20 to +60	°C

Electrical Characteristics (TA = 25°C)

Item	Symbol	Min.	Тур.	Max.	Unit
Complex Veltage	V _{DD}	4.75	5.0	5.25	V
Supply Voltage	V _{DD} -V _O	3.0	-	6.3	V
High Level In Voltage (V _{DD} = 5.0V)	V _{IH}	2.2	-	-	٧
Low Level In Voltage (I _{OH} = 0.2 mA)	V _{IL}	-	_	0.6	٧
High Level Output Volt. (-I _{OH} = 0.2 mA)	V _{OH}	2.4	-	-	٧
Low Level Output Volt. (I _{OL} = 1.2 mA)	V _{OL}	-	-	0.4	٧
LED Forward Voltage (I _F = 220)	V _F	3.8	4.1	4.4	٧
LED Reverse Current (V _R = 8 V)	I _R	-	_	2.4	mA

Optical Characteristics (TA 5 = 25° C, $\phi = 0^{\circ}$, $\theta = 0^{\circ}$)

Item	Symbol	Min.	Тур.	Max.	Unit
Viewing Angle	ф	-	50	-	degree
Contrast	К	-	6.0	-	-
Turn On	T _{on}	-	200	400	ms
Turn Off	T _{off}	-	250	400	ms

Product specifications contained herein may be changed without prior notice.

It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.



Connector Pin Assignment

Pin No.	Signal	Function
1	GND	Ground
2	V_{DD}	+5 Power Supply
3	V _O	LCD Drive Voltage
4	RS	"H" Data Input "L" Command Input
5	R/W	Read/Write
6	Е	Enable
7	DBO	
8	DB1	
9	DB2	
10	DB3	Data Bus DB0-DB7 are for 8-bit operation
11	DB4	DB4-DB7 are for 4-bit operation
12	DB5	
13	DB6	
14	DB7	

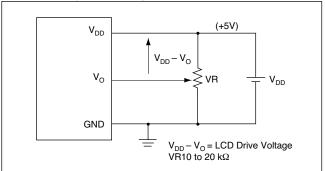
Power Supply

The LCD panel is driven by the voltage $V_{\text{DD}}-V_{\text{O}}$, so you need an adjustable V_{O} for contrast control and temperature compensation.

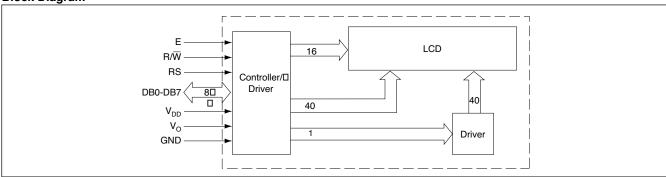
Temperature Variations

Temperature	V _{DD} -V _O
0°C	5.00
+25°C	4.75
+50°C	4.50

Power Supply Block Diagram



Block Diagram



Dimensional Outline

