



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WH0802A1-VATN

General Specification

Item	Dimension	Unit
Number of Characters	8 characters x 2Lines	—
Module dimension	58.0 x 32.0 x 13.2 (MAX)	mm
View area	38.0 x 16.0	mm
Active area	27.81 x 11.5	mm
Dot size	0.56 x 0.66	mm
Dot pitch	0.60 x 0.70	mm
Character size	2.96 x 5.56	mm
Character pitch	3.55 x 5.94	mm
Duty	1/16	
Backlight Type	LED	
IC	RW1063	
Interface	6800/SPI/I2C	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	°C
Storage Temperature	T_{ST}	-30	—	+80	°C
Input Voltage	V_{IN}	-0.3	—	$V_{DD}+0.3$	V
Supply Voltage For Logic	$V_{DD}-V_{SS}$	-0.3	—	5.5	V
Supply Voltage For LCD	$V_{DD}-V_0$	$V_{SS}-0.3$	—	$V_{SS}+7.0$	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	4.5	5.0	5.5	V
Supply Voltage For LCD *Note	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	—	—	—	V
		$T_a=70^{\circ}\text{C}$	—	—	—	V
Input High Volt.	V_{IH}	—	2.5	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	-0.3	—	0.6	V
Output High Volt.	V_{OH}	—	3.9	—	—	V
Output Low Volt.	V_{OL}	—	—	—	0.4	V
Supply Current	I_{DD}	$V_{DD}=5.0\text{V}$	—	2.4	3.6	mA

Interface Pin Function

Pin No.	Symbol	Level	Description
1	V _{SS}	0V	Ground
2	V _{DD}	5.0V	Supply Voltage for logic
3	NC	—	No connection
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read(MPU→Module) L: Write(MPU→Module)
6	E	H,H→L	Chip enable signal
7	DB0	H/L	Data bus line
8	DB1	H/L	Data bus line
9	DB2	H/L	Data bus line
10	DB3	H/L	Data bus line
11	DB4	H/L	Data bus line
12	DB5	H/L	Data bus line
13	DB6	H/L	Data bus line
14	DB7	H/L	Data bus line
15	A	—	Power supply for B/L +
16	K	—	Power supply for B/L -

Contour Drawing

