



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WG240128A1

General Specification

Item	Dimension	Unit
Number of dots	240 x 128	—
Module dimension	170.0 x 93.4 x 12.4(MAX)	mm
View area	128.0 x 74.0	mm
Active area	119.97 x 63.97	mm
Dot size	0.47 x 0.47	mm
Dot pitch	0.50 x 0.50	mm
Duty	1/128	
Backlight Type	LED	
IC	RA6963	
Interface	80 series	

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	—	+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	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	20.1	V
		$T_a=25^{\circ}\text{C}$	17.5	18.0	18.5	V
		$T_a=70^{\circ}\text{C}$	16.3	—	—	V
Input High Volt.	V_{IH}	—	$0.8V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	0	—	$0.15 V_{DD}$	V
Output High Volt.	V_{OH}	—	$V_{DD}-0.3$	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	0	—	0.3	V
Supply Current	I_{DD}	—	—	33	60	mA

Interface Pin Function

Pin No.	Symbol	Description
1	FGND	Frame ground (Connected to bezel)
2	Vss	GND
3	Vdd	Power supply
4	Vo	Power supply for LCD driver
5	/WR	Data write. Write data into RA6963when WR = L
6	RD	Data read. Read data from RA6963when RD = L
7	/CE	L : Chip enable
8	C/D	WR=L , C/D=H : Command Write C/D=L: Data write RD=L , C/D=H : Status Read C/D=L: Data read
9	Vee	Negative Voltage Output
10	/RESET	H : Normal ; L : Initialize RA6963
11	DB0	Data bus line
12	DB1	Data bus line
13	DB2	Data bus line
14	DB3	Data bus line
15	DB4	Data bus line
16	DB5	Data bus line
17	DB6	Data bus line
18	DB7	Data bus line
19	FS	Pins for selection of font; H : 6 * 8 , L : 8 * 8
20	RV	H: Reverse L: Normal

Contour Drawing

