



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.:

WG128128I

General Specification

Item	Dimension	Unit
Number of dots	128 x 128	—
Module dimension	72.5 x 69.9 x 10.2 (MAX)	mm
View area	50.0 x 49.0	mm
Active area	44.77 x 44.77	mm
Dot size	0.32 x 0.32	mm
Dot pitch	0.35 x 0.35	mm
Duty	1/128	
Backlight Type	LED	
IC	RA6963	
Interface	8080	

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

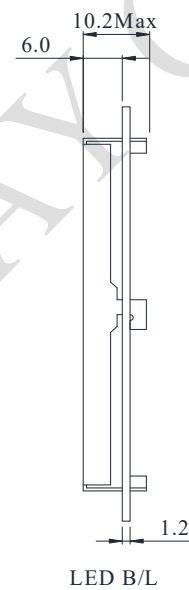
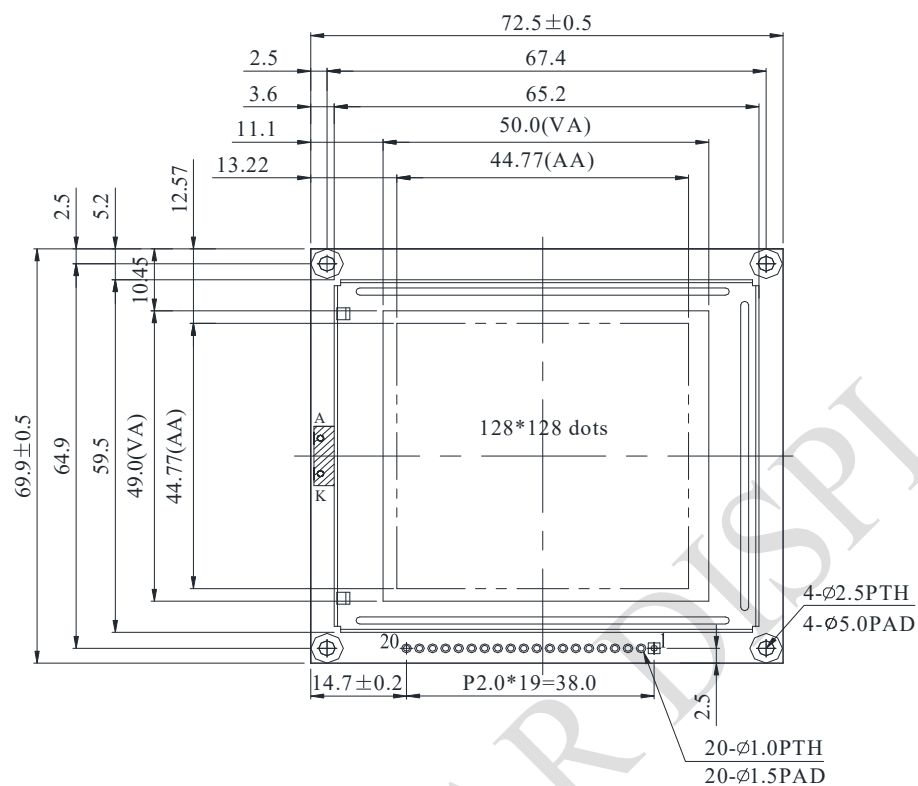
Electrical Characteristics

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	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	15.8	16.3	16.8	V
		$T_a=70^{\circ}\text{C}$	—	—	—	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}	$V_{DD}=5.0\text{V}$	9	19	38	mA

Interface Pin Function

Pin No.	Symbol	Level	Description
1	DB0	H / L	Data bus line
2	DB1	H / L	Data bus line
3	DB2	H / L	Data bus line
4	DB3	H / L	Data bus line
5	DB4	H / L	Data bus line
6	DB5	H / L	Data bus line
7	DB6	H / L	Data bus line
8	DB7	H / L	Data bus line
9	C/D	H / L	WR=L , C/D=H : Command Write C/D=L: Data write RD=L , C/D=H : Status Read C/D=L: Data read
10	/RD	H / L	Data read. Read data from RA6963 when RD = L
11	/WR	H / L	Data write. Write data into RA6963 when WR = L
12	/CE	L	L : Chip enable
13	/RST	L	H : Normal ; L : Initialize RA6963
14	Vo	—	Power supply for LCD
15	Vdd	5.0V	Power supply for logic circuit
16	VSS	—	Ground
17	Vee	—	Negative Voltage Output
18	NC/FS	—	No connection
19	A	—	Power supply for B/L +
20	K	—	Power supply for B/L -

Contour Drawing



PIN NO.	SYMBOL
1	DB0
2	DB1
3	DB2
4	DB3
5	DB4
6	DB5
7	DB6
8	DB7
9	C/D
10	$\overline{RD}$
11	$\overline{WR}$
12	$\overline{CE}$
13	$\overline{RST}$
14	V _o
15	V _{dd}
16	V _{ss}
17	V _{ee}
18	NC/FS
19	A
20	K

The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.