SPECIFICATION

MODULE NO.: WO12864N

General Specification

Item	Dimension	Unit
Number of dots	128 x 64	—
Module dimension	89.7 x 49.8 x 6.0	mm
View area	69.0 x 36.5	mm
Active area	63.97 x 31.97	mm
Dot size	0.47 x 0.47	mm
Dot pitch	0.5 x 0.5	mm
Duty	1/65 , 1/9 Bias	
Backlight Type	LED	
IC	ST7567	
Interface	6800/8080/4-Line SPI	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Input Voltage	V_I	-0.3	—	V_{DD}+0.3	V
Digital Power Supply Voltage	V_{DD}-Vss	-0.3	—	3.6	V
LCD Power supply voltage	V0-XV0	-0.3	—	16	V

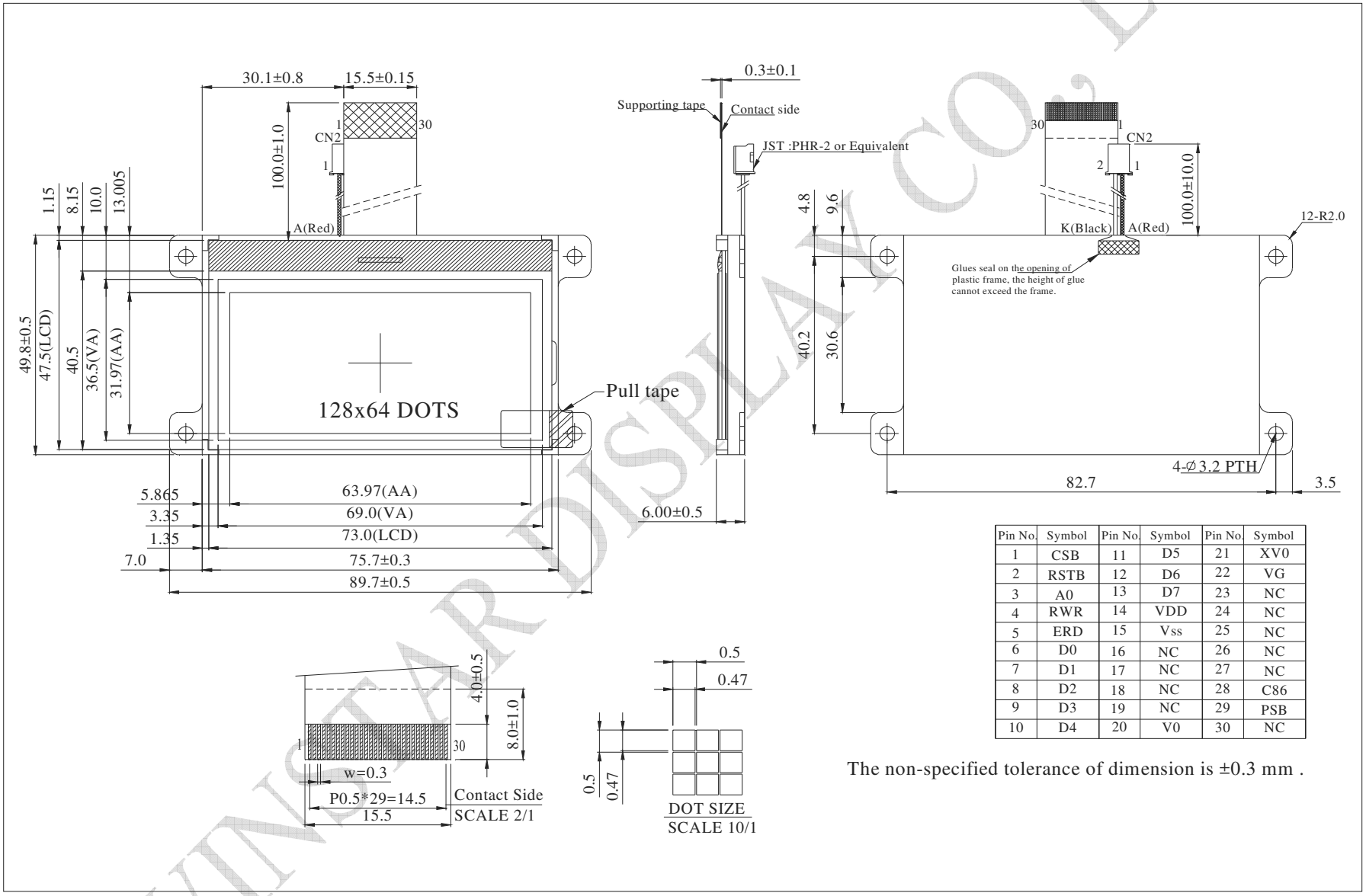
Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	—	2.8	3.0	3.2	V
Supply Voltage For LCM *Note	V_{OP}	Ta=-20℃	—	—	—	V
		Ta=25℃	9.3	9.5	9.7	V
		Ta=70℃	—	—	—	V
Input High Volt.	V_{IH}	—	0.7 V_{DD}	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	Vss	—	0.3V_{DD}	V
Output High Volt.	V_{OH}	—	0.8 V_{DD}	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	Vss	—	0.2V_{DD}	V
Supply Current	I_{DD}	V_{DD}=3.0V	—	0.7	1.0	mA

Interface Pin Function

Pin	Symbol	Function Description
1	CSB	Chip select input pin.Interface access is enabled when CSB is “L”,When CSB is non-active(CSB=”H”),D[7:0] pins are high impedance.
2	RSTB	Hardware reset input pin. When RSTB is “L”, interna initialization is executed and the internal registers will be initialized.
3	A0	It determines whether the access is related to data or command. A0=“H” : Indicates that signals on D[7:0] are display data. A0=“L” : Indicates that signals on D[7:0] are command
4	RWR	Read/Write execution control pin. When PSB is “H”, RWR is not used in serial interface and should fix to “H” by VDD1 or VDDH.
5	ERD	Read/Write execution control pin. When PSB is “H”, ERD is not used in serial interface and should fix to “H” by VDD1 or VDDH.
6	D0	When using 8-bit parallel interface: (6800 or 8080 mode) 8-bit bi-directional data bus. Connect to the data bus of 8-bit microprocessor. When CSB is non-active (CSB=“H”), D[7:0] pins are high impedance.
7	D1	
8	D2	
9	D3	
10	D4	
11	D5	
12	D6	
13	D7	
14	VDD	Power supply
15	Vss	Ground
16-19	NC	Not connect.
20	V0	V0 is the LCD driving voltage for common circuits at negative frame.
21	XV0	XV0 is the LCD driving voltage for common circuits at positive frame.
22	VG	VG is the LCD driving voltage for segment circuits.
23-27	NC	Not connect.
28	C86	C86 selects the microprocessor type in parallel interface mode.
29	PSB	PSB selects the interface type: Serial or Parallel.
30	NC	Not connect.

Contour Drawing



Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	CSB	11	D5	21	XV0
2	RSTB	12	D6	22	VG
3	A0	13	D7	23	NC
4	RWR	14	VDD	24	NC
5	ERD	15	Vss	25	NC
6	D0	16	NC	26	NC
7	D1	17	NC	27	NC
8	D2	18	NC	28	C86
9	D3	19	NC	29	PSB
10	D4	20	V0	30	NC

The non-specified tolerance of dimension is ±0.3 mm .