WINSTAR Display

OLED SPECIFICATION

Model No:

WEX009664A

General Description

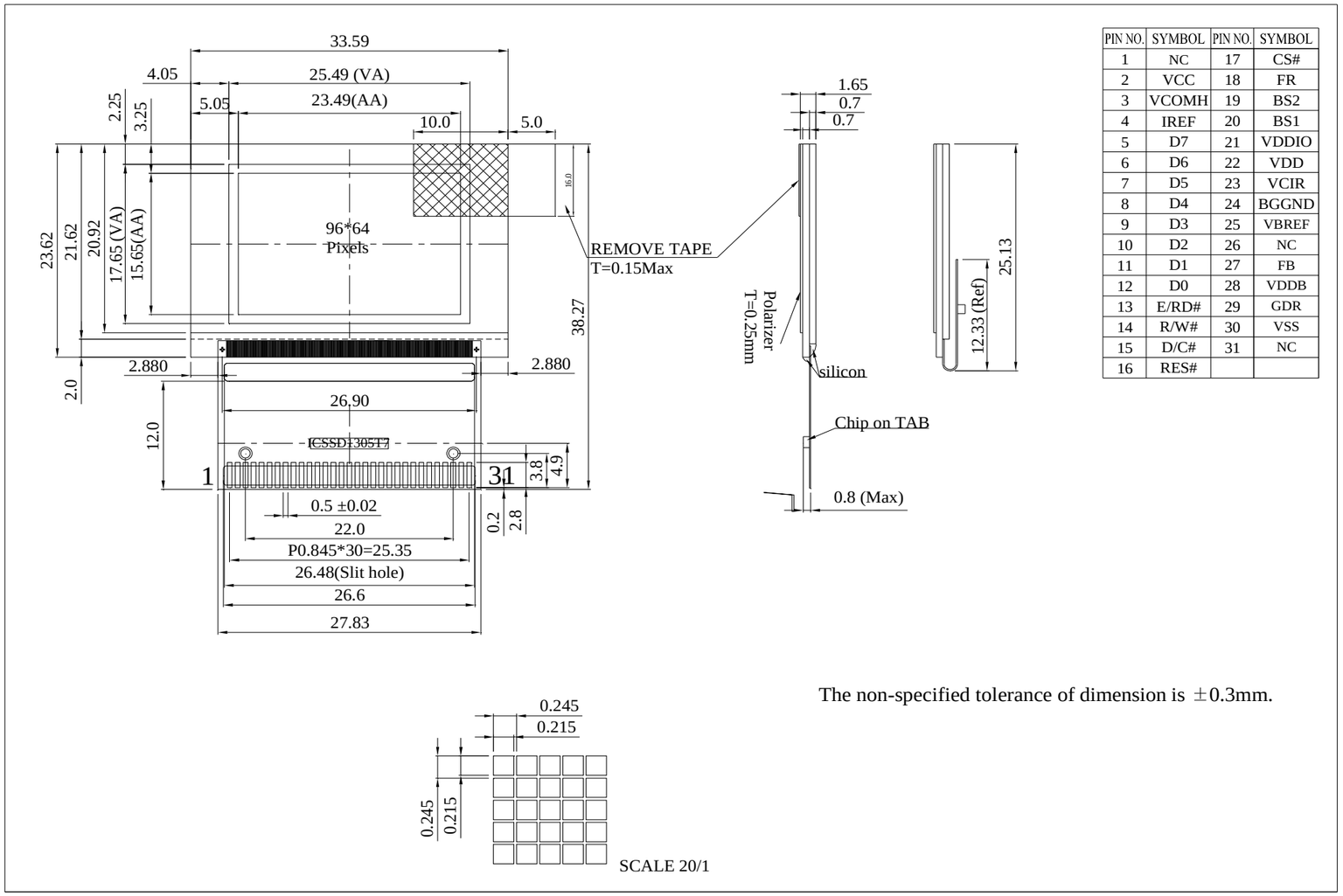
Item	Dimension	Unit
Number of Characters	96 Dots x 64 Dots	-
Module dimension	33.59 × 23.62 × 1.65 (mm)	mm
Active Area	23.49 × 15.65 (mm)	mm
Pixel Pitch	0.215 × 0.215 (mm)	mm
Pixel Size	0.245 × 0.245 (mm)	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/64 Duty	

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Supply Voltage for Logic	VDD	-0.3	3.5	V	1,2
Supply Voltage for Display	VCC	8	16	V	1,2
Operating Temperature	TOP	-40	80	℃	—
Storage Temperature	TSTG	-40	80	℃	—

first FC components

Contour Drawing



PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	NC	17	CS#
2	VCC	18	FR
3	VCOMH	19	BS2
4	IREF	20	BS1
5	D7	21	VDDIO
6	D6	22	VDD
7	D5	23	VCIR
8	D4	24	BGGND
9	D3	25	VBREF
10	D2	26	NC
11	D1	27	FB
12	D0	28	VDDB
13	E/RD#	29	GDR
14	R/W#	30	VSS
15	D/C#	31	NC
16	RES#		

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

Interface Pin Function

<table>
<tr><th>No.</th><th>Symbol</th><th>Function</th></tr>
<tr><td>1</td><td>NC</td><td>No connection</td></tr>
<tr><td>2</td><td>VCC</td><td>Power supply for analog circuit.</td></tr>
<tr><td>3</td><td>VCOMH</td><td>Com Voltage Output. A capacitor should be connected
between this pin and VSS.</td></tr>
<tr><td>4</td><td>IREF</td><td>Reference current input pin.
A resistor should be connected between this pin and VSS.</td></tr>
<tr><td>5~12</td><td>D7~D0</td><td>Data bus.</td></tr>
<tr><td>13</td><td>E/RD#</td><td>Data read operation is initiated when it’s pull low.</td></tr>
<tr><td>14</td><td>R/W#</td><td>Data write operation is initiated when it’s pull low.</td></tr>
<tr><td>15</td><td>D/C#</td><td>Data/ Command control.
Pull high for write/read display data.
Pull low for write command or read status.</td></tr>
<tr><td>16</td><td>RES#</td><td>Reset signal input.
When it’s low, initialization of SSD1305 is executed.</td></tr>
<tr><td>17</td><td>CS#</td><td>Chip select input.</td></tr>
<tr><td>18</td><td>FR</td><td>This pin outputs RAM write synchronization signal. Proper timing between MCU data writing and frame display timing can be achieved to prevent tearing effect.
It should be kept NC if it is not used. Please refer to Section 8.4 for details usage.</td></tr>
<tr><td>19</td><td>BS2</td><td rowspan="2">Communicating Protocol Select
These pins are MCU interface selection input. See the
following table:
<table>
<tr><th></th><th>68XX-parallel</th><th>80XX-parallel</th><th>Serial</th></tr>
<tr><td>BS1</td><td>0</td><td>1</td><td>0</td></tr>
<tr><td>BS2</td><td>1</td><td>1</td><td>0</td></tr>
</table>
</td></tr>
<tr><td>20</td><td>BS1</td></tr>
<tr><td>21</td><td>VDDIO</td><td>Power supply for interface logic level. It should be match with MCU interface voltage level. VDDIO must always be equal or lower than VDD.</td></tr>
<tr><td>22</td><td>VDD</td><td>Power supply for logic circuit.</td></tr>
<tr><td>23</td><td>VCIR</td><td>This is a reserved pin. It should be kept NC</td></tr>
<tr><td>24</td><td>BGGND</td><td>This pin must be connected to ground.</td></tr>
<tr><td>25</td><td>VBREF</td><td>This is a reserved pin. It should be kept NC</td></tr>
<tr><td>26</td><td>NC</td><td>No connection</td></tr>
<tr><td>27</td><td>FB</td><td>This is a reserved pin. It should be kept NC</td></tr>
<tr><td>28</td><td>VDDB</td><td>This is a reserved pin. It must be connected to VDD.</td></tr>
<tr><td>29</td><td>GDR</td><td>This is a reserved pin. It should be kept NC</td></tr>
<tr><td>30</td><td>VSS</td><td>Ground.</td></tr>
<tr><td>31</td><td>NC</td><td>No connection</td></tr>
</table>