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## User's Guide

# C-25-0629

# VFD

(Vacuum Fluorescent Character Display Module)

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# Vacuum Fluorescent Display Specification

**PART NUMBER:** C-25-0629

**FEATURES:** 9 Digits, Alphanumeric, with Icons – DVD

**APPLICATION:** DVD- Character Display  
(Alphanumeric)

**RATINGS:** Below

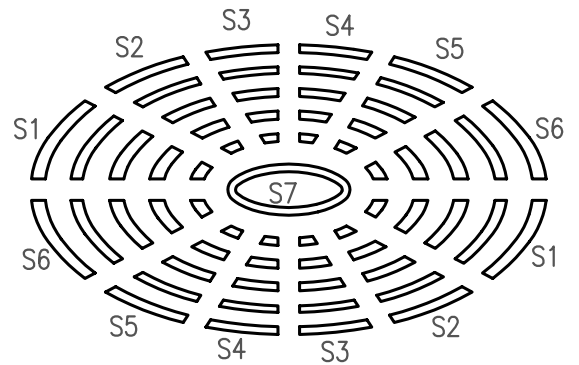
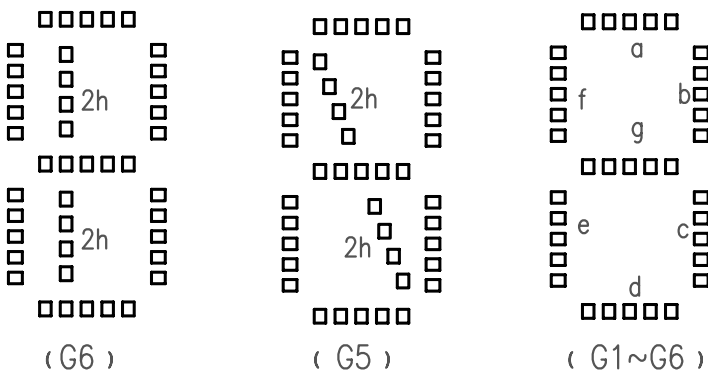
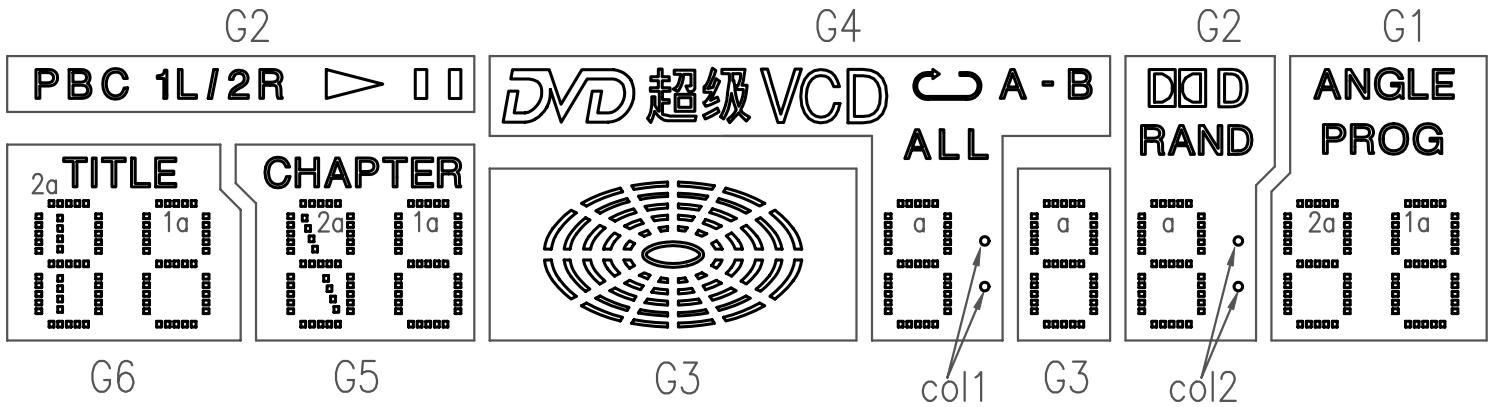
| <b>Outer Dimensions</b>      | Panel Length             | P.L.        | 100.0              | mm          |             |
|------------------------------|--------------------------|-------------|--------------------|-------------|-------------|
|                              | Panel Height             | P.H.        | 25.0               | mm          |             |
|                              | Panel Thickness          | P.T.        | 6.5                | mm          |             |
| <b>Leads</b>                 | Lead Pitch               | L.P.        | 2.54               | Mm          |             |
|                              | Lead Out                 | -           | SIL                |             |             |
| <b>Character Size</b>        | Character Height         | C.H.        | -                  | mm          |             |
|                              | Character Width          | C.W.        | -                  | mm          |             |
| <b>Item</b>                  | <b>Symbol</b>            | <b>Min.</b> | <b>Recommended</b> | <b>Max.</b> | <b>Unit</b> |
| <b>Filament Voltage</b>      | Ef                       | 3.15        | 3.5                | 3.85        | Vac         |
| <b>Peak Grid Voltage</b>     | Ec                       | -           | 20.0               | 22.0        | Vp-p        |
| <b>Peak Anode Voltage</b>    | Eb                       | -           | 20.0               | 22.0        | Vp-p        |
| <b>Cut-off Bias</b>          | Ek                       | -           | -                  | -           | -           |
| <b>Duty Cycle</b>            | Du                       | -           | 1/7                | -           | -           |
| <b>Pulse Width</b>           | Tp                       | -           | 100                | -           | uS          |
| <b>Operating Temperature</b> | Topr                     | -20         | -                  | + 80        | C           |
| <b>Storage Temperature</b>   | Tstg                     | -55         | -                  | + 85        | C           |
| <b>Color of Illumination</b> | Green / Ysh.O /<br>Ysh.G |             |                    |             |             |

## Electrical Characteristics

| Item                         | Symbol                                      | Test Condition                                                              | Min.                                      | Typical                                    | Max.                               | Unit                                                                                                  |
|------------------------------|---------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Filament Current</b>      | If<br>-                                     | Ef = 3.5 Vac<br>eb = ec = 0                                                 | 126.0<br>-                                | 140.0<br>-                                 | 154.0<br>-                         | mAac<br>-                                                                                             |
| <b>Anode Current</b>         | ib/6G<br>ib/5G<br>ib/1G<br>ib/2,3G<br>ib/4G | Ef = 3.5 Vac<br>eb = 20.0 Vp-p<br>ec = 20.0 Vp-p<br>Du = 1/7<br>tp = 100 uS | -<br>-<br>-<br>-<br>-                     | 3.0<br>4.0<br>5.0<br>7.0<br>9.0            | 6.0<br>8.0<br>10.0<br>14.0<br>18.0 | mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub> |
| <b>Grid Current</b>          | ic/6G<br>ic/1,5G<br>ic/2G<br>ic/3,4G<br>-   |                                                                             | -<br>-<br>-<br>-<br>-                     | 5.0<br>7.0<br>9.0<br>11.0<br>-             | 10.0<br>14.0<br>18.0<br>22.0<br>-  | mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub><br>mA <sub>p-p</sub> |
| <b>Luminance</b>             | L(G)<br>L(Ysh.G)<br>L(Ysh.O)                |                                                                             | 350<br>(102)<br>140<br>(41)<br>60<br>(17) | 700<br>(204)<br>280<br>(82)<br>120<br>(34) | -<br><br><br><br><br>              | cd/m <sup>2</sup><br>(fL)<br>cd/m <sup>2</sup><br>(fL)<br>cd/m <sup>2</sup><br>(fL)                   |
| <b>Luminance Ratio</b>       | Lmin/Lmax                                   |                                                                             | 50                                        | -                                          | -                                  | %                                                                                                     |
| <b>Grid Cut-off Voltage</b>  | Ecco                                        | Ef = 3.5 Vac<br>Eb = 20.0 Vdc                                               | -4.5                                      | -                                          | -                                  | Vdc                                                                                                   |
| <b>Anode Cut-off Voltage</b> | Ebco                                        | Ef = 3.5 Vac<br>ec = 20.0 Vp-p<br>Du = 1/7<br>tp = 100 uS                   | -4.5                                      | -                                          | -                                  | Vdc                                                                                                   |

Drive Mode: Dynamic State

附图2：显示内容及栅极分割 ( Display Pattern And Grid Assignment )



显示颜色 ( color of illumination ):

黄橙色 ( Ysh.O ) : PBC □□ DVD 超级 ↻ □□□ S2, S5  
 ( x=0.527, y=0.465 )

黄绿色 ( Ysh.G ) : ▷ S1, S4  
 ( x=0.292, y=0.617 )

绿色 ( Green ) : 其余 ( Others )  
 ( x=0.250, y=0.440 )

附图 3: 阳极连接 (Anode Connection)

型号 Type No.: VFD25-0629

|     | G6    | G5      | G4   | G3 | G2   | G1    |
|-----|-------|---------|------|----|------|-------|
|     | TITLE | CHAPTER |      |    | PBC  | ANGLE |
| P1  | 2h    | 2h      | 超级   | s7 | 1L   | PROG  |
| P2  | 2d    | 2d      | VCD  | s6 | /    | 2d    |
| P3  | 2e    | 2e      | DVD  | s5 | 2R   | 2e    |
| P4  | 2c    | 2c      | C    | s4 | ▷    | 2c    |
| P5  | 2g    | 2g      | A    | s3 | □□   | 2g    |
| P6  | 2f    | 2f      | -B   | s2 | DDD  | 2f    |
| P7  | 2b    | 2b      | ALL  | s1 | RAND | 2b    |
| P8  | 2a    | 2a      | col1 |    | col2 | 2a    |
| P9  | 1d    | 1d      | d    | d  | d    | 1d    |
| P10 | 1e    | 1e      | e    | e  | e    | 1e    |
| P11 | 1c    | 1c      | c    | c  | c    | 1c    |
| P12 | 1g    | 1g      | g    | g  | g    | 1g    |
| P13 | 1f    | 1f      | f    | f  | f    | 1f    |
| P14 | 1b    | 1b      | b    | b  | b    | 1b    |
| P15 | 1a    | 1a      | a    | a  | a    | 1a    |