



User's Guide

D0106LT-43-0601

VFD- **RoHS Compliant**

(Vacuum Fluorescent Display)

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Vacuum Fluorescent Display Specification

PART NUMBER: **D0106LT-43-0601**

FEATURES: 6 Digits – Seven Segmented, with Decimal points, commas, underscores

APPLICATION: Character Display- (7-Seg)

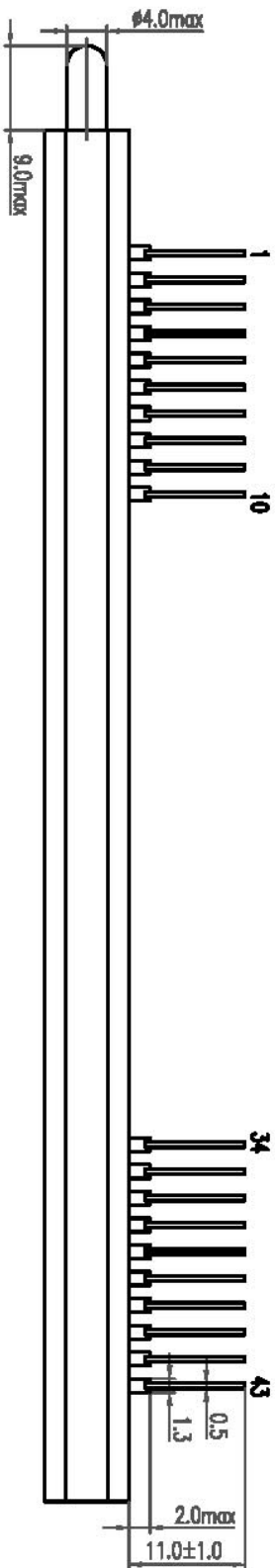
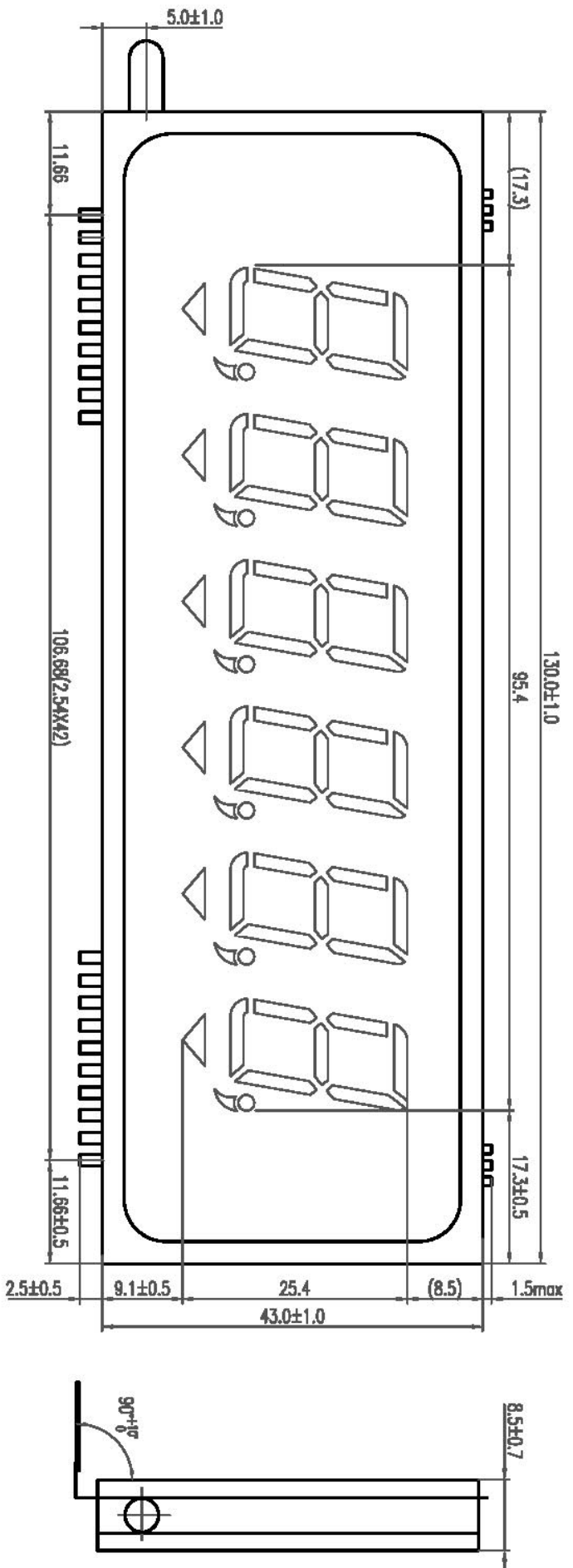
RATINGS: Below

| Outer Dimensions | Panel Length | P.L. | 130.0 | mm | |
|------------------------------|------------------|-------------|--------------------|-------------|-------------|
| | Panel Height | P.H. | 43.0 | mm | |
| | Panel Thickness | P.T. | 8.5 | mm | |
| Leads | Lead Pitch | L.P. | 2.54 | mm | |
| | Lead Out | - | SIL | | |
| Character Size | Character Height | C.H. | 20.0 | mm | |
| | Character Width | C.W. | 9.5 | mm | |
| Item | Symbol | Min. | Recommended | Max. | Unit |
| Filament Voltage | Ef | 4.0 | 4.4 | 4.8 | Vac |
| Peak Grid Voltage | ec | - | 34.0 | 40.0 | Vp-p |
| Peak Anode Voltage | eb | - | 34.0 | 40.0 | Vp-p |
| Cut-off Bias | Ek | - | 0 | - | Vdc |
| Duty Cycle | Du | - | 1/8 | - | - |
| Pulse Width | tp | - | 100 | - | uS |
| Operating Temperature | Topr | -20 | - | + 70 | C |
| Storage Temperature | Tstg | -55 | - | + 80 | C |
| Color of Illumination | Green | | | | |

**Electrical
Characteristics**

| Item | Symbol | Test Condition | Min. | Typical | Max. | Unit |
|------------------------------|-----------|--|-------|---------|-------|-------------------|
| Filament Current | if | Ef = 4.4 Vac | 180.0 | 200.0 | 220.0 | mAac |
| | - | eb = ec = 0 | - | - | - | - |
| Anode Current | ib / 1~6G | Ef = 4.4 Vac | - | 15.0 | 30.0 | mAp-p |
| | - | eb = 34.0 Vp-p | - | - | - | - |
| | - | ec = 34.0 Vp-p | - | - | - | - |
| | - | Du = 1/8 | - | - | - | - |
| | - | tp = 100uS | - | - | - | - |
| Grid Current | ic / 1~6G | (All segs are ON) | - | 18.0 | 36.0 | mAp-p |
| | - | | - | - | - | - |
| | - | | - | - | - | - |
| | - | | - | - | - | - |
| | - | | - | - | - | - |
| Luminance | L(G) | | 686 | 1372 | - | cd/m ² |
| | | | (200) | (400) | | fL |
| Luminance Ratio | Lmin/Lmax | | 50 | - | - | % |
| Grid Cut-off Voltage | Ecco | Ef = 4.4 Vac Eb = 34.0 Vdc | -6.0 | - | - | Vdc |
| Anode Cut-off Voltage | Ebco | Ef = 4.4 Vdc ec = 34.0 Vp-p Du = 1/8 Tp = 100uS | -4.0 | - | - | Vdc |

DRIVE MODE: Dynamic State

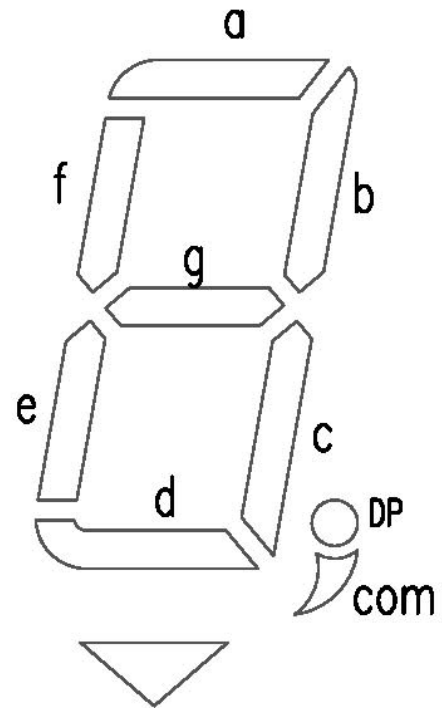
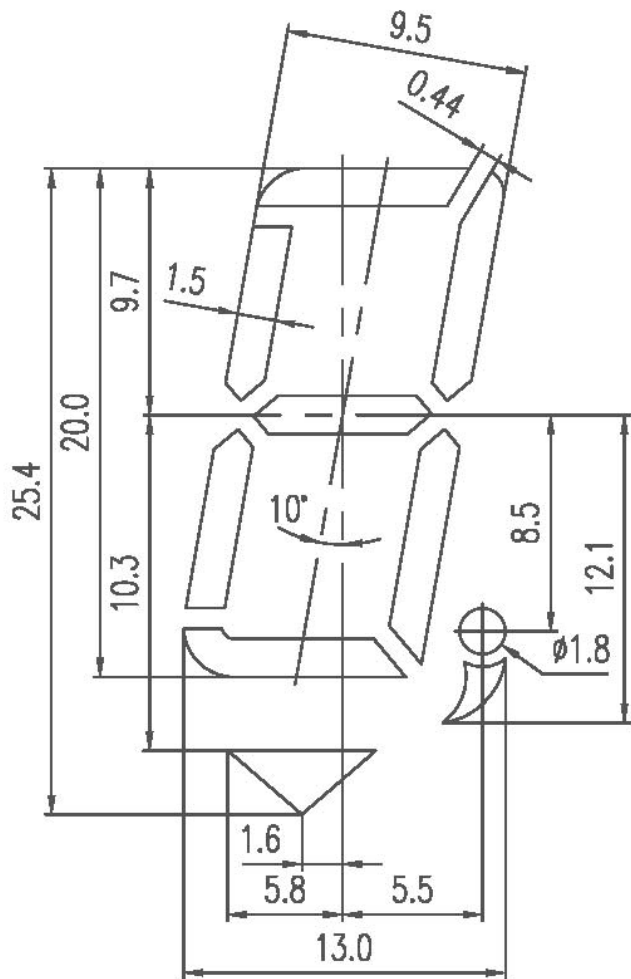
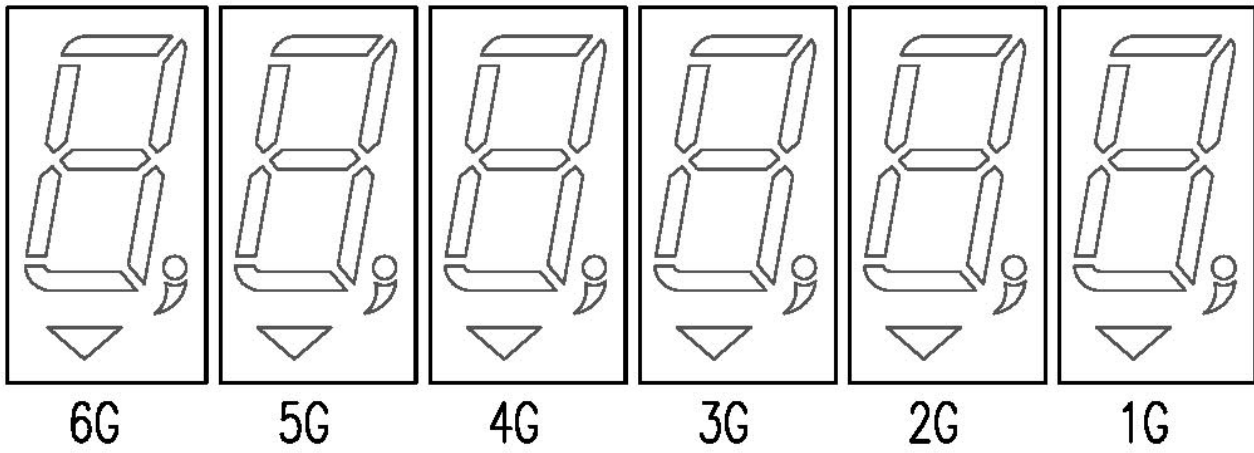


Pin Connections:

| Pin Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|------------|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Connection | F | F | P6 | P7 | P5 | P4 | P10 | G6 | G5 | G4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| Pin Number | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| Connection | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | G3 | G2 | G1 | P9 | P8 | P3 | P2 | P1 | F | F | |

NOTE: F: Filament G: Grid P: Anode NP: No Pin

2: Grid Assignment:



3: Pin Assignment:

| | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|-----|-----|-----|-----|-----|-----|
| P1 | a | a | a | a | a | a |
| P2 | b | b | b | b | b | b |
| P3 | c | c | c | c | c | c |
| P4 | d | d | d | d | d | d |
| P5 | e | e | e | e | e | e |
| P6 | f | f | f | f | f | f |
| P7 | g | g | g | g | g | g |
| P8 | DP | DP | DP | DP | DP | DP |
| P9 | com | com | com | com | com | com |
| P10 | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ |