

User's Guide

D0106LT-33-0604N

VFD- **RoHS Compliant**

(Vacuum Fluorescent Display Module)

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Vacuum Fluorescent Display Specification

PART NUMBER: **D0106LT-33-0604N**

FEATURES: 6 Digits, 7-Segmented, Instrumentation

APPLICATION: Character Display (*7-Segmented*)

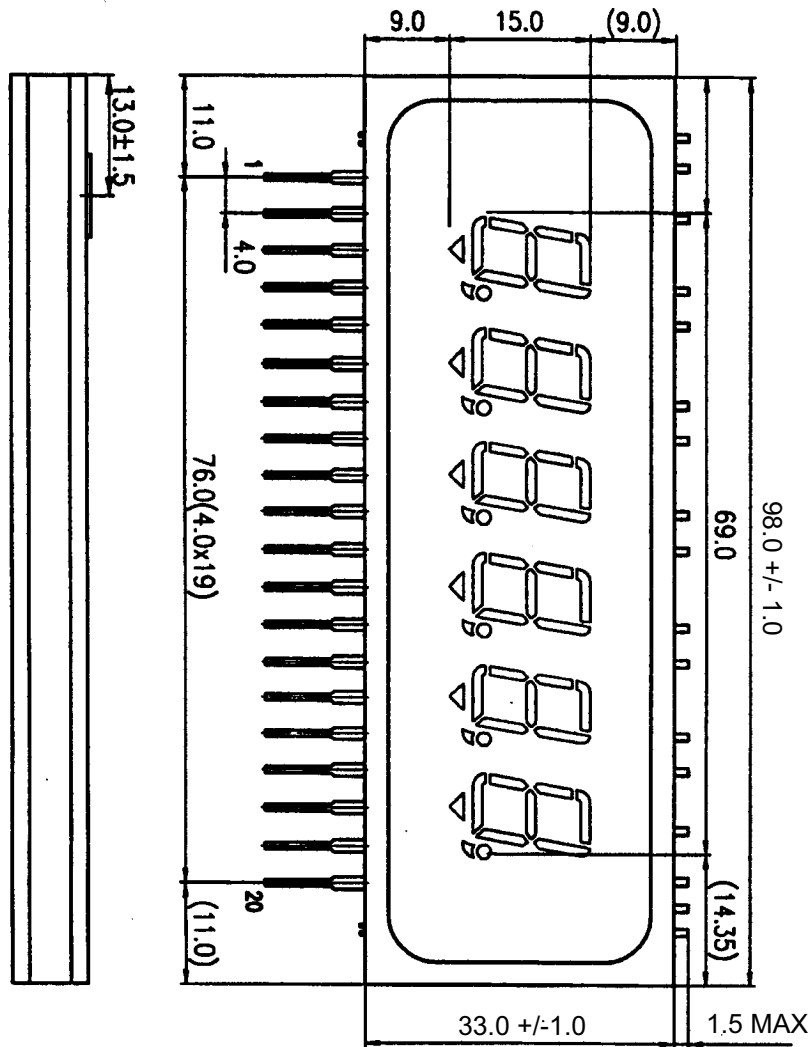
RATINGS: Below

| Outer Dimensions | Panel Length | P.L. | 98.0 | mm | |
|------------------------------|------------------|-------------|--------------------|-------------|-------------|
| | Panel Height | P.H. | 33.0 | mm | |
| | Panel Thickness | P.T. | 8.0 | mm | |
| Leads | Lead Pitch | L.P. | 2.54 | mm | |
| | Lead Out | - | SIL | | |
| Character Size | Character Height | C.H. | 12.4 | mm | |
| | Character Width | C.W. | 6.8 | mm | |
| Item | Symbol | Min. | Recommended | Max. | Unit |
| Filament Voltage | Ef | 3.42 | 3.8 | 4.12 | Vac |
| Peak Grid Voltage | ec | - | 26.0 | 33.0 | Vp-p |
| Peak Anode Voltage | eb | - | 26.0 | 33.0 | Vp-p |
| - | - | - | - | - | - |
| Duty Cycle | Du | - | 1/7 | - | - |
| Pulse Width | tp | - | 200 | - | uS |
| Operating Temperature | Topr | -20 | - | + 70 | C |
| Storage Temperature | Tstg | -55 | - | + 80 | C |
| Color of Illumination | Green | | | | |

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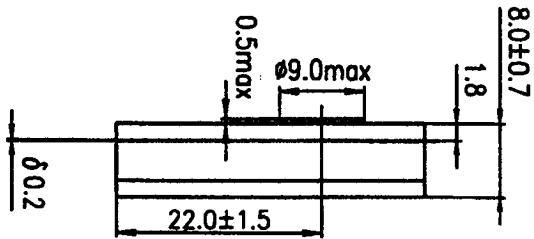
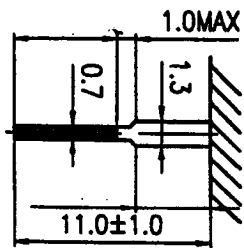
**Electrical
Characteristics**

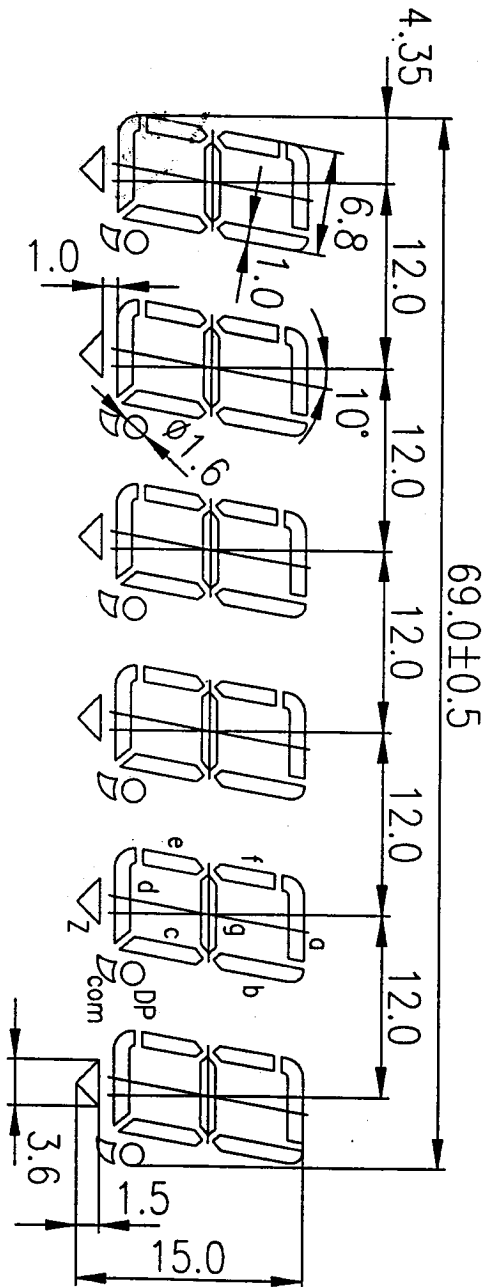
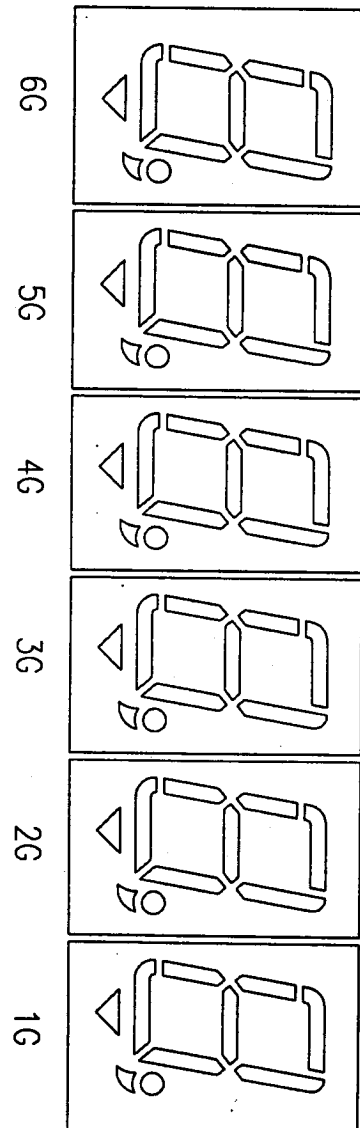
| Item | Symbol | Test Condition | Min. | Typical | Max. | Unit |
|------------------------------|------------|---|-------|---------|-------|-------------------|
| Filament Current | if | Ef = 3.8 Vac | 97.0 | 108.0 | 119.0 | mAac |
| | - | eb = ec = 0 | - | - | - | - |
| Anode Current | ib/1G~6G | Ef = 3.8 Vac eb = 26.0 Vp-p ec = 26.0 Vp-p Du = 1/7 Tp = 200 uS | - | 5.0 | 10.0 | mAp-p |
| | - | | - | - | - | mAp-p |
| | - | | - | - | - | mAp-p |
| | - | | - | - | - | mAp-p |
| | - | | - | - | - | mAp-p |
| Grid Current | ic / 1G~6G | | - | 7.0 | 14.0 | MAp-p |
| | - | | - | - | - | MAp-p |
| | - | | - | - | - | MAp-p |
| | - | | - | - | - | MAp-p |
| | - | | - | - | - | MAp-p |
| Luminance | L(G) | | 350 | 700 | - | cd/m ² |
| | - | | (102) | (204) | - | fL |
| Luminance Ratio | Lmin/Lmax | | 50 | - | - | % |
| Grid Cut-off Voltage | Ecco | Ef = 3.8 Vac eb = 26.0 Vdc | -4.0 | - | - | Vdc |
| Anode Cut-off Voltage | Ebco | Ef = 3.8 Vac ec = 26.0 Vp-p Du = 1/7 Tp = 200uS | -2.0 | - | - | Vdc |



Notes: F: Filament G: Grid NC: No Connect P: Anode

| Pin No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---------|---|----|---------|------|---------|------|---------|----|---------|------|---------|------|---------|----|----|----|----|----|----|----|
| Connect | F | NC | 6G P(φ) | P(φ) | 5G P(φ) | P(φ) | 4G P(φ) | NC | 3G P(φ) | P(φ) | 2G P(φ) | P(φ) | 1G P(φ) | F | | | | | | |





| | 1G | 2G | 3G | 4G | 5G | 6G |
|-----|-----|-----|-----|-----|-----|-----|
| P1 | a | a | a | a | a | a |
| P2 | b | b | b | b | b | b |
| P3 | c | c | c | c | c | c |
| P4 | dp | dp | dp | dp | dp | dp |
| P5 | com | com | com | com | com | com |
| P6 | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ |
| P7 | d | d | d | d | d | d |
| P8 | e | e | e | e | e | e |
| P9 | f | f | f | f | f | f |
| P10 | 9 | 9 | 9 | 9 | 9 | 9 |