



0.39"(10.00mm)Three Digit 7 Segment Display

Features:

- *High segment intensity
- *Wide viewing angle
- *Range of colors
- *Gray face White segment
- *RoHS compliant

Available option:

- *Alternative face and segment color
- *Alternative font
- *Cropped terminal pins
- *Available emitting color
- *Low current version

Electro/Optical Characteristics If=20mA Ta=25°C

| Part Number Common Cathode | Part Number Common Anode | Emitting Color | Peak Wavelength | Forward Voltage V _F /Seg. | | Luminous Intensity I _v /seg. | |
|-------------------------------|-----------------------------|--------------------------|--------------------|--------------------------------------|------|---|-------|
| | | | | Typ. | Max. | Min. | Typ. |
| NFD-3931AH-21 | NFD-3931BH-21 | GaP/GaP Red | 700 | 2.25 | 2.50 | 0.40 | 0.80 |
| NFD-3931AS-21 | NFD-3931BS-21 | GaAlAs/GaAs SH Hi-Red | 660 | 1.80 | 2.20 | 8.00 | 12.00 |
| NFD-3931AD-21 | NFD-3931BD-21 | GaAlAs/GaAs DH Super Red | 660 | 1.80 | 2.50 | 22.00 | 28.00 |
| NFD-3931AE-21 | NFD-3931BE-21 | GaAsP/GaP Orange | 632 | 2.10 | 2.50 | 8.00 | 12.00 |
| NFD-3931AY-21 | NFD-3931BY-21 | GaAsP/GaP Yellow | 585 | 2.10 | 2.50 | 4.00 | 7.00 |
| NFD-3931AG-21 | NFD-3931BG-21 | GaP/GaP Green | 570 | 2.20 | 2.50 | 7.00 | 11.00 |
| Units | | | nm | V | | mcd | |

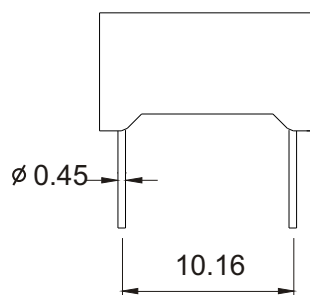
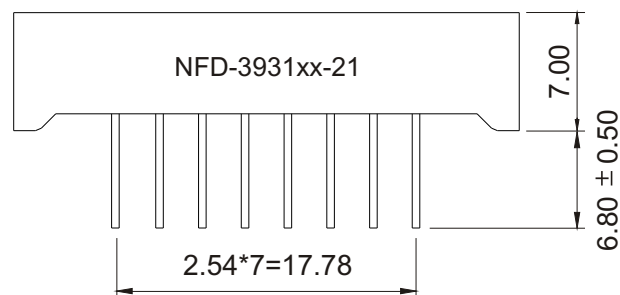
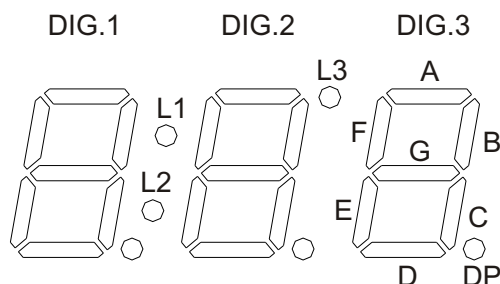
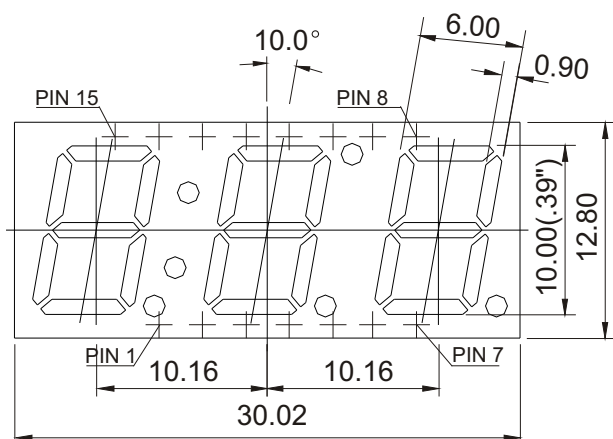
Maximum Ratings Ta=25°C (Derate above 25°C)

| Characteristic | Test Condition | Symbol | H | S | D | E | Y | G | Units |
|--------------------------------|------------------------------------|------------------|------------|-------|-------|-------|-------|-------|-------|
| Pulse Forward Current Per Seg. | 1/10 duty cycle 0.1ms Pulse width | I _{FP} | 50 | 100 | 100 | 100 | 100 | 100 | mA |
| DC Forward Current Per Seg. | | I _F | 15 | 25 | 25 | 30 | 30 | 30 | mA |
| Reverse Current Per Seg. | V _R =5V | I _R | 10 | 10 | 10 | 10 | 10 | 10 | μA |
| Power Dissipation | | P _D | 40*27 | 60*27 | 60*27 | 80*27 | 80*27 | 80*27 | mW |
| Operating Temperature | | T _{OPR} | -40 to +80 | | | | | | °C |
| Storage Temperature | | T _{TSG} | -40 to +85 | | | | | | °C |
| Lead soldering temperature | 1.60mm from body maximum 3 seconds | | 260 | | | | | | °C |



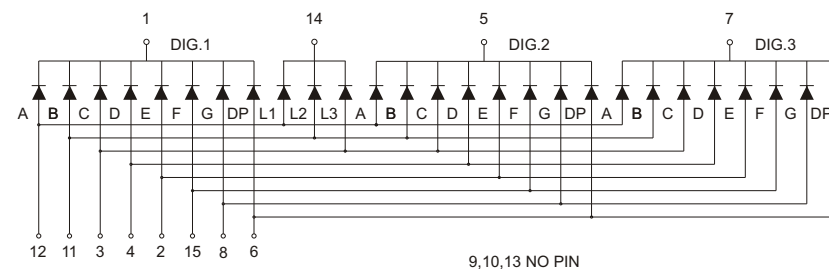
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PACKAGE DIMENSION

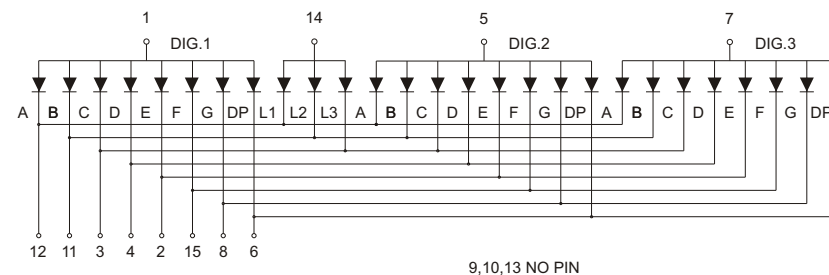


INTERNAL CIRCUIT DIAGRAM

Common Cathode NFD-3931Ax



Common Anode NFD-3931Bx



Tolerance ±0.25mm unless stated

Checked

Chen N.H.

Approved

Jason Chen

Date

Mar/16/2009

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