



## 0.39"(9.90mm)Single 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<br>Common Cathode | Part Number<br>Common Anode | Emitting Color           | Peak<br>Wavelength | Forward Voltage V <sub>F</sub> /Seg. |      | Luminous Intensity I <sub>v</sub> /Seg. |       |
|-------------------------------|-----------------------------|--------------------------|--------------------|--------------------------------------|------|---|-------|
|                               |                             |                          |                    | Typ.                                 | Max. | Min.                                    | Typ.  |
| NFD-3911AH-21-L4              | NFD-3911BH-21-L4            | GaP/GaP Red              | 700                | 2.25                                 | 2.50 | 0.40                                    | 0.80  |
| NFD-3911AS-21-L4              | NFD-3911BS-21-L4            | GaAlAs/GaAs SH Hi-Red    | 660                | 1.80                                 | 2.20 | 8.00                                    | 12.00 |
| NFD-3911AD-21-L4              | NFD-3911BD-21-L4            | GaAlAs/GaAs DH Super Red | 660                | 1.80                                 | 2.20 | 22.00                                   | 28.00 |
| NFD-3911AE-21-L4              | NFD-3911BE-21-L4            | GaAsP/GaP Orange         | 632                | 2.10                                 | 2.50 | 8.00                                    | 12.00 |
| NFD-3911AY-21-L4              | NFD-3911BY-21-L4            | GaAsP/GaP Yellow         | 585                | 2.10                                 | 2.50 | 4.00                                    | 7.00  |
| NFD-3911AG-21-L4              | NFD-3911BG-21-L4            | GaP/GaP Green            | 568                | 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 <sub>FP</sub>  | 50         | 100  | 100  | 100  | 100  | 100  | mA    |
| DC Forward Current Per Seg.    |                                    | I <sub>F</sub>   | 15         | 25   | 25   | 30   | 30   | 30   | mA    |
| Reverse Current Per Seg.       | V <sub>R</sub> =5V                 | I <sub>R</sub>   | 10         | 10   | 10   | 10   | 10   | 10   | μA    |
| Power Dissipation              |                                    | P <sub>D</sub>   | 40*8       | 60*8 | 60*8 | 80*8 | 80*8 | 80*8 | mW    |
| Operating Temperature          |                                    | T <sub>OPR</sub> | -40 to +80 |      |      |      |      |      | °C    |
| Storage Temperature            |                                    | T <sub>TSG</sub> | -40 to +85 |      |      |      |      |      | °C    |
| Lead soldering temperature     | 1.60mm from body maximum 3 seconds |                  | 260        |      |      |      |      |      | °C    |

Checked

Chen N.H.

Approved

Jason Chen

Date

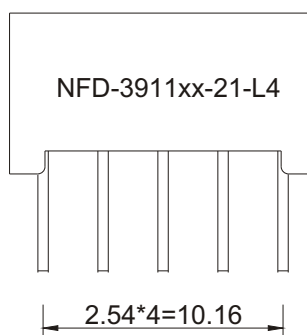
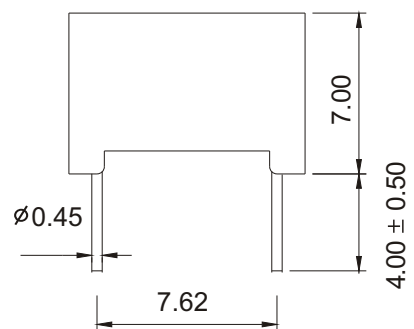
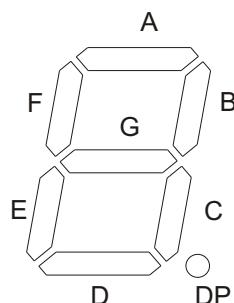
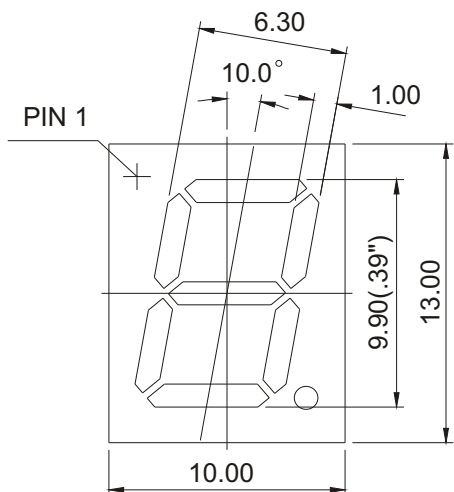
Mar/05/2007

PAGE 1 / 2



## 0.39"(9.90mm)Single Digit 7 Segment Display

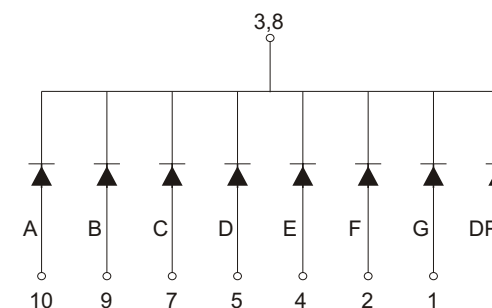
### PACKAGE DIMENSION



Tolerance  $\pm 0.25\text{mm}$  unless stated

### INTERNAL CIRCUIT DIAGRAM

#### Common Cathode NFD-3911Ax



#### Common Anode NFD-3911Bx

