



1.80"(45.00mm)Single Digit 7 Segment Display

Features:

- *Ultra segment intensity
- *Wide viewing angle
- *Range of colors
- *Black 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.(DP) | | Luminous Intensity I _v /Seg.(DP) | |
|-------------------------------|-----------------------------|---------------------------|--------------------|--|------------|---|-----------------|
| | | | | Typ. | Max. | Min. | Typ. |
| NFD-18011CUHR-11 | NFD-18011DUHR-11 | AlGaInP/GaAs Ultra Red | 640 | 4.00(2.00) | 5.00(2.50) | 80.00 (40.00) | 120.00(60.00) |
| NFD-18011CUE-11 | NFD-18011DUE-11 | AlGaInP/GaAs Ultra Orange | 632 | 4.00(2.00) | 5.00(2.50) | 80.00 (40.00) | 120.00(60.00) |
| NFD-18011CYO-11 | NFD-18011DYO-11 | AlGaInP/GaAs Ultra Amber | 605 | 4.00(2.00) | 5.00(2.50) | 80.00 (40.00) | 120.00(60.00) |
| NFD-18011CUY-11 | NFD-18011DUY-11 | AlGaInP/GaAs Ultra Yellow | 590 | 4.00(2.00) | 5.00(2.50) | 80.00 (40.00) | 120.00(60.00) |
| NFD-18011CUG-11 | NFD-18011DUG-11 | AlGaInP/GaAs Ultra Green | 574 | 4.20(2.10) | 5.00(2.50) | 50.00 (25.00) | 80.00 (40.00) |
| NFD-18011CPG-11 | NFD-18011DPG-11 | InGaN/SiC Pure Green | 525 | 6.60(3.30) | 7.60(3.80) | 300.00(150.00) | 400.00(200.00) |
| NFD-18011CUB-11 | NFD-18011DUB-11 | InGaN/SiC Ultra Blue | 470 | 6.60(3.30) | 7.60(3.80) | 80.00 (40.00) | 200.00(100.00) |
| NFD-18011CUW-11 | NFD-18011DUW-11 | InGaN/SiC Ultra White | X-0.31/Y-0.31 | 6.60(3.30) | 7.60(3.80) | 400.00 (200.00) | 1000.00(500.00) |
| Units | | | nm | V | | mcd | |

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

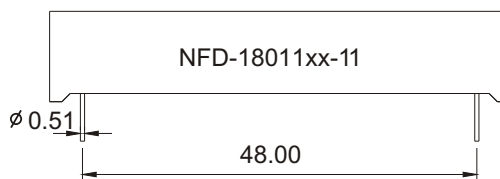
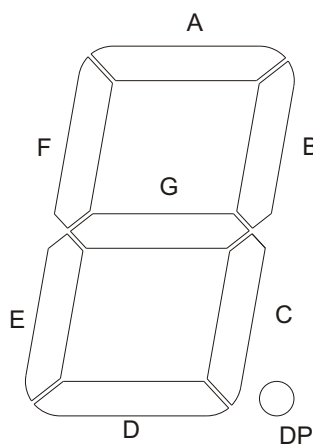
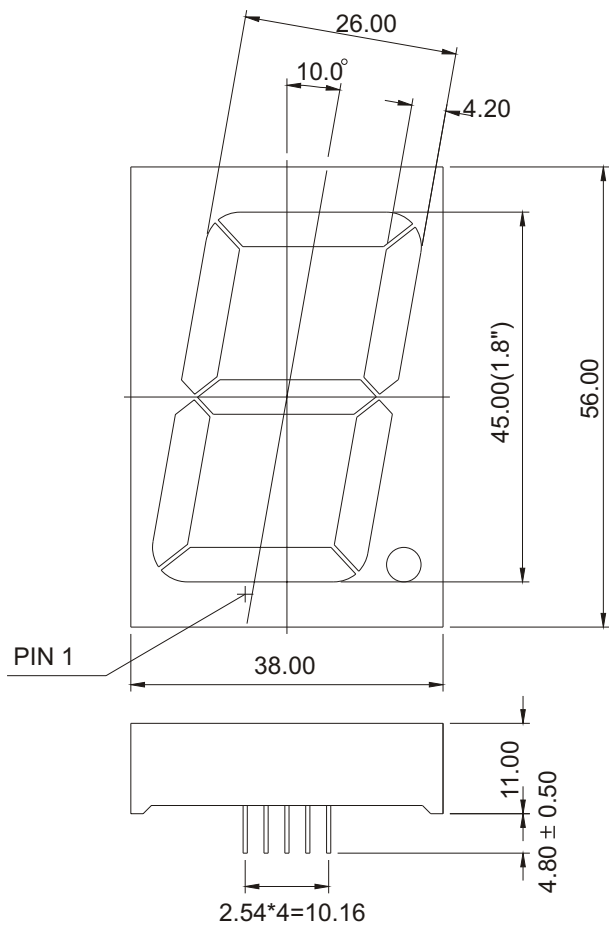
| Characteristic | Test Condition | Symbol | UHR | UE | YO | UY | UG | PG | UB | UW | Units |
|--------------------------------|------------------------------------|------------------|------------|-------|-------|-------|-------|--------|--------|--------|-------|
| Pulse Forward Current Per Seg. | 1/10 duty cycle 0.1ms Pulse width | I _{FP} | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | mA |
| DC Forward Current Per Seg. | | I _F | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | mA |
| Reverse Current Per Seg. | V _R =10V | I _R | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | μA |
| Power Dissipation | | P _D | 60*15 | 65*15 | 65*15 | 65*15 | 75*15 | 110*15 | 120*15 | 120*15 | 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 |

| | | | | | | |
|---------|-----------|----------|------------|------|-------------|------------|
| Checked | Chen N.H. | Approved | Jason Chen | Date | Dec/17/2006 | PAGE 1 / 2 |
|---------|-----------|----------|------------|------|-------------|------------|



1.80"(45.00mm)Single Digit 7 Segment Display

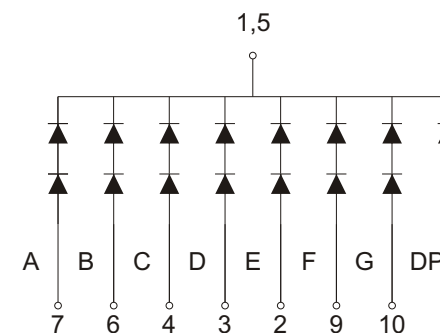
PACKAGE DIMENSION



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

INTERNAL CIRCUIT DIAGRAM

Common Cathode NFD-18011Cx



Common Anode NFD-18011Dx

