



0.50"(12.70mm)Single Digit Alphanumeric Display

Features:

- *High 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. | | Luminous Intensity I _v /Seg. | |
|-------------------------------|-----------------------------|--------------------------|--------------------|--------------------------------------|------|-----------------------------------------|-------|
| | | | | Typ. | Max. | Min. | Typ. |
| NFD-5013AH-11 | NFD-5013BH-11 | GaP/GaP Red | 700 | 2.25 | 2.50 | 0.40 | 0.80 |
| NFD-5013AS-11 | NFD-5013BS-11 | GaAlAs/GaAs SH Hi-Red | 660 | 1.80 | 2.20 | 8.00 | 12.00 |
| NFD-5013AD-11 | NFD-5013BD-11 | GaAlAs/GaAs DH Super Red | 660 | 1.80 | 2.20 | 22.00 | 28.00 |
| NFD-5013AE-11 | NFD-5013BE-11 | GaAsP/GaP Orange | 632 | 2.10 | 2.50 | 8.00 | 12.00 |
| NFD-5013AY-11 | NFD-5013BY-11 | GaAsP/GaP Yellow | 585 | 2.10 | 2.50 | 4.00 | 7.00 |
| NFD-5013AG-11 | NFD-5013BG-11 | 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 _{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*17 | 60*17 | 60*17 | 80*17 | 80*17 | 80*17 | 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

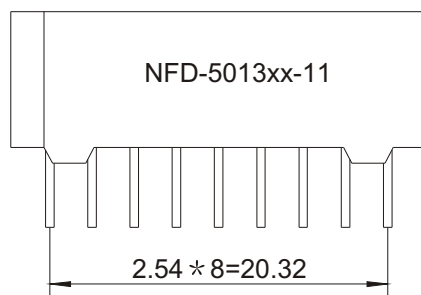
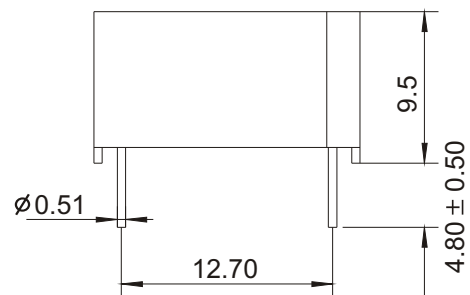
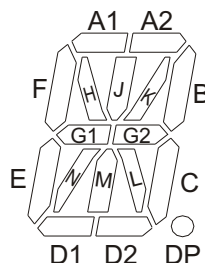
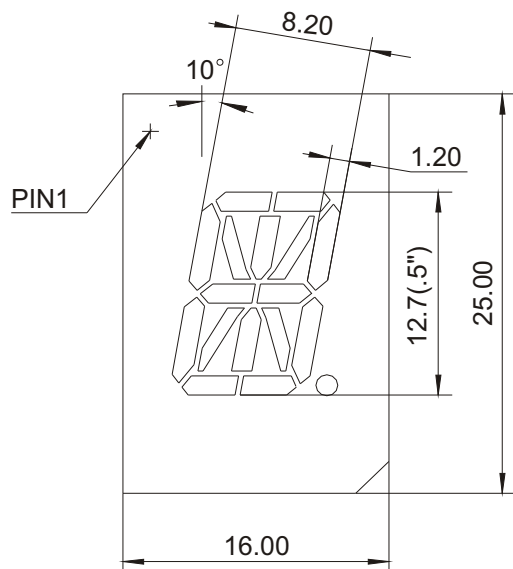
May/09/2006

PAGE 1 / 2



0.50"(12.70mm)Single Digit Alphanumeric Display

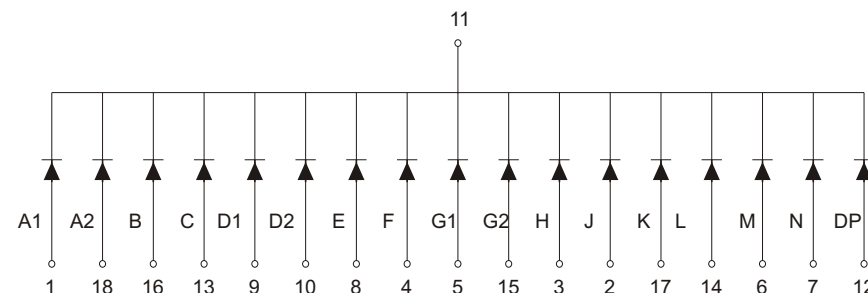
PACKAGE DIMENSION



Tolerance ±0.25mm unless stated

INTERNAL CIRCUIT DIAGRAM

Common Cathode
NFD-5013Ax



Common Anode
NFD-5013Bx

