



1.20" (39.10mm) Φ 3.00mm 5*7 Single Color Dot Matrix Displays

Features:

- *High dot intensity
- *Wide viewing angle
- *Range of colors
- *Gray face white dot
- *RoHS compliant

Available option:

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

Electro/Optical Characteristics $I_f=20mA$ $T_a=25^\circ C$

| Part Number Row Cathode Column Anode | Part Number Row Anode Column Cathode | Emitting Color | Peak Wavelength | Forward Voltage V_F /Dot | | Luminous Intensity I_v /Dot | |
|---|---|--------------------------|--------------------|----------------------------|------|-------------------------------|-------|
| | | | | Typ. | Max. | Min. | Typ. |
| NFM-12571AH-21 | NFM-12571BH-21 | GaP/GaP Red | 700 | 2.25 | 2.50 | 0.40 | 0.80 |
| NFM-12571AS-21 | NFM-12571BS-21 | GaAlAs/GaAs SH Hi-Red | 660 | 1.80 | 2.20 | 8.00 | 12.00 |
| NFM-12571AD-21 | NFM-12571BD-21 | GaAlAs/GaAs DH Super Red | 660 | 1.80 | 2.20 | 22.00 | 28.00 |
| NFM-12571AE-21 | NFM-12571BE-21 | GaAsP/GaP Orange | 632 | 2.10 | 2.50 | 8.00 | 12.00 |
| NFM-12571AY-21 | NFM-12571BY-21 | GaAsP/GaP Yellow | 585 | 2.10 | 2.50 | 4.00 | 7.00 |
| NFM-12571AG-21 | NFM-12571BG-21 | GaP/GaP Green | 568 | 2.20 | 2.50 | 7.00 | 11.00 |
| Units | | | nm | V | | mcd | |

Maximum Ratings $T_a=25^\circ C$ (Derate above $25^\circ C$)

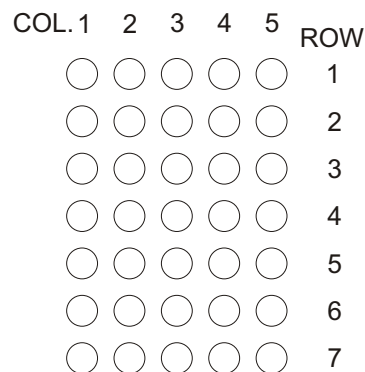
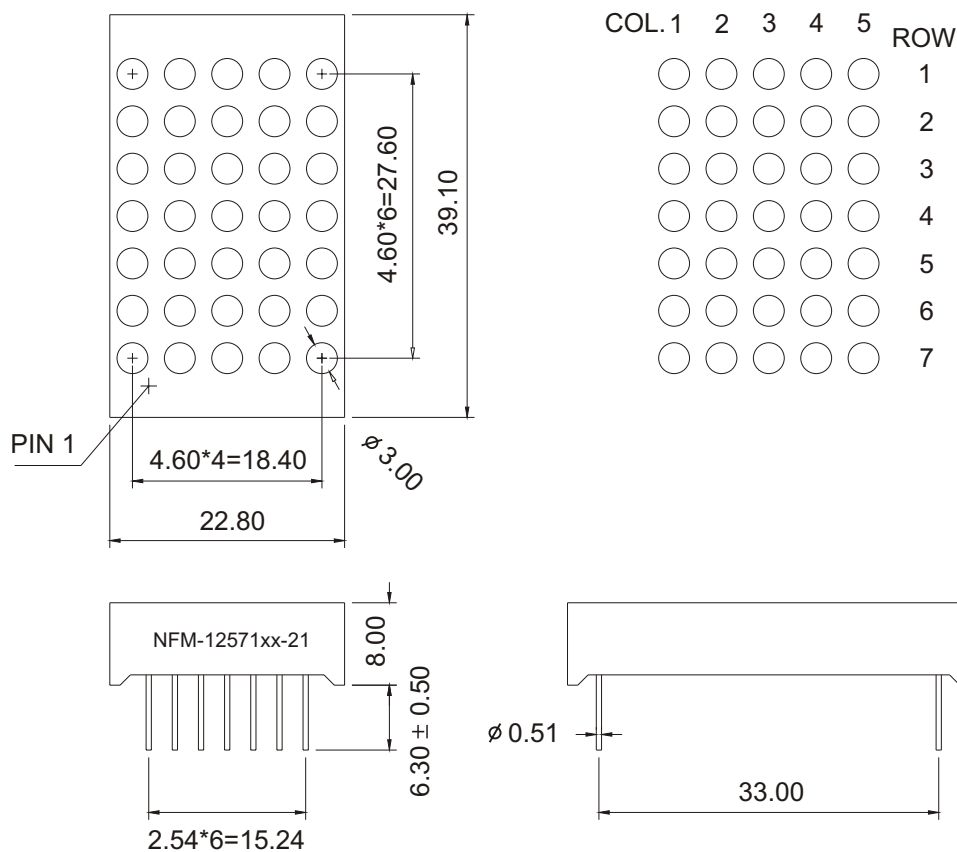
| Characteristic | Test Condition | Symbol | H | S | D | E | Y | G | Units |
|-------------------------------|------------------------------------|-----------|------------|-------|-------|-------|-------|-------|------------|
| Pulse Forward Current Per Dot | 1/10 duty cycle 0.1ms Pulse width | I_{FP} | 50 | 100 | 100 | 100 | 100 | 100 | mA |
| DC Forward Current Per Dot | | I_F | 15 | 25 | 25 | 30 | 30 | 30 | mA |
| Reverse Current Per Dot | $V_R=5V$ | I_R | 10 | 10 | 10 | 10 | 10 | 10 | μA |
| Power Dissipation | | P_D | 40*35 | 60*35 | 60*35 | 80*35 | 80*35 | 80*35 | mW |
| Operating Temperature | | T_{OPR} | -40 to +80 | | | | | | $^\circ C$ |
| Storage Temperature | | T_{TSG} | -40 to +85 | | | | | | $^\circ C$ |
| Lead soldering temperature | 1.60mm from body maximum 3 seconds | | 260 | | | | | | $^\circ C$ |

| | | | | | | | | | |
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| Checked | Chen N.H. | Approved | Jason Chen | Date | Mar/10/2007 | PAGE 1 / 2 | | | |
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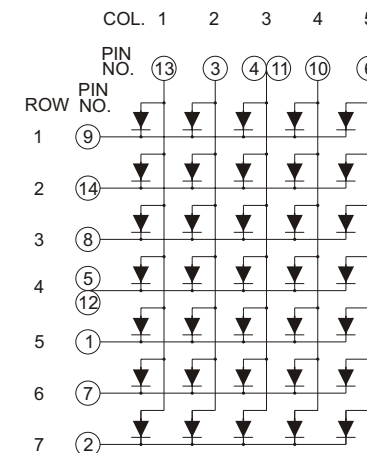
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PACKAGE DIMENSION

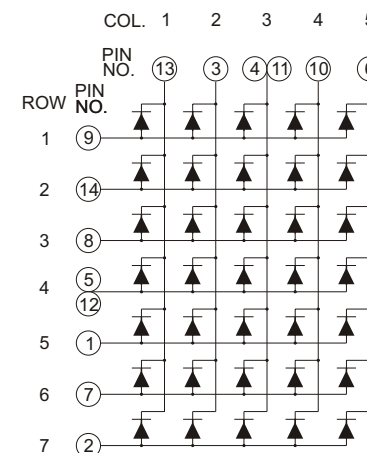


INTERNAL CIRCUIT DIAGRAM

Row Cathode
Column Anode
NFM-12571Ax



Row Anode
Column Cathode
NFM-12571Bx



Tolerance \pm 0.25mm unless stated