



ELECTRONICS, INC.  
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## NTE3166, NTE3167, NTE3168 Light Emitting Diode – 2mm x 5mm

**Features:**

- Lead Frame Type w/Diffused Lens:
  - NTE3166 (Red, GaP/GaP)
  - NTE3167 (Green, GaP/GaP)
  - NTE3168 (Yellow, GaAsP/GaP)

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

|  |                                    |
|--|------------------------------------|
| Power Dissipation, $P_D$ .....               | 70mW                               |
| Continuous Forward Current, $I_F$ .....      | 25mA                               |
| Reverse Voltage, $V_R$ .....                 | 3V                                 |
| Operating Temperature Range, $T_{opr}$ ..... | $-25^\circ$ to $+80^\circ\text{C}$ |

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

| Parameter                     | Symbol           | Test Conditions | Min | Typ | Max | Unit          |
|-------------------------------|------------------|-----------------|-----|-----|-----|---------------|
| View Angle of Half Power      | $2\theta_{1/2}$  |                 | –   | 50  | –   | Degree        |
| Peak Wave Length<br>NTE3166   | $\lambda_{peak}$ |                 | –   | 700 | –   | nm            |
| NTE3167                       |                  |                 | –   | 565 | –   | nm            |
| NTE3168                       |                  |                 | –   | 585 | –   | nm            |
| Forward Voltage               | $V_F$            |                 | –   | 2.1 | –   | V             |
| NTE3166 <b>Only</b>           |                  |                 | –   | 1.9 | –   | V             |
| Forward Current               | $I_F$            |                 | –   | 20  | –   | mA            |
| NTE3166 <b>Only</b>           |                  |                 | –   | 5   | –   | mA            |
| Luminous Intensity<br>NTE3166 | L                |                 | –   | 0.4 | –   | mcd           |
| NTE3167                       |                  |                 | –   | 0.8 | –   | mcd           |
| NTE3168                       |                  |                 | –   | 2.0 | –   | mcd           |
| Reverse Current               | $I_R$            | $V_R = 3V$      | –   | –   | 10  | $\mu\text{A}$ |

