



ELECTRONICS, INC.
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NTE3134 & NTE3137 Light Emitting Diode, 1.8mm

Features:

- NTE3134 Super Yellow
- NTE3137 Super Red

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

| | |
|---|----------------|
| Power Dissipation, P_D | 100mW |
| Forward Current, I_F | |
| Continuous | 25mA |
| Peak (Note 1) | 50mA |
| Reverse Voltage, V_R | 5V |
| LED Junction Temperature, T_j | +100°C |
| Operating Temperature Range, T_{opr} | -30° to +85°C |
| Storage Temperature Range, T_{stg} | -40° to +100°C |
| Lead Temperature (During Soldering, .062 (1.6mm) from case bottom, 3sec max), T_L | |
| NTE3134 Only | +240°C |
| Reflow Soldering (Preheat +120° to +150°C, 60 to 120sec for 5sec max) | |
| NTE3137 Only | +240°C |

Note 1. Duty Ratio = 1/10, Pulse Width = 0.1ms

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

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|------------------------------|--------------------|------------------------------|-----|------|------|--------|
| View Angle of Half Power | $2\theta_{1/2}$ | $I_F = 20\text{mA}$ | - | 24 | - | Degree |
| Forward Voltage | V_F | $I_F = 20\text{mA}$ | - | 2.0 | 2.5 | V |
| NTE3134 | | | | 2.0 | 2.6 | V |
| Reverse Current | I_R | $V_R = 5\text{V}$ | - | - | 10 | uA |
| Luminous Intensity | I_V | $I_F = 20\text{mA}$ (Note 2) | 900 | 1300 | - | mcd |
| NTE3134 | | | | 1000 | 1500 | - |
| Peak Emission Wavelength | λ_p | $I_F = 20\text{mA}$ | - | 592 | - | nm |
| NTE3134 | | | | 635 | - | mÅ |
| Dominate Wavelength | $\lambda_{d(HUE)}$ | $I_F = 20\text{mA}$ (Note 3) | 585 | 590 | 594 | nm |
| NTE3134 | | | | - | 626 | - |
| Spectrum Width of Half Valve | $\Delta\lambda$ | $I_F = 20\text{mA}$ | - | 25 | - | nm |

Note 2. Tolerance: 30%, measured using Exeltron 2001.

Note 3. The dominate wavelength, λ_d , is derived from the CIE Chromaticity Diagram and represents the color of the device.

