



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

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	μA
Luminous Intensity	I_V	$I_F = 20\text{mA}$ (Note 2)	900	1300	-	mcd
NTE3134			1000	1500	-	mcd
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	-	nm
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.

