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

NTE3007 thru NTE3011
Discrete LED Indicators

Features:

- All Plastic Mold Type:
  - NTE3007 (Diffused Red, Gallium Arsenide Phosphide Red)
  - NTE3008 (Diffused Bright Red, Gallium Phosphide on Gallium Phosphide Red)
  - NTE3009 (Diffused Orange, Gallium Arsenide Phosphide on Gallium Phosphide Orange)
  - NTE3010 (Diffused Green, Gallium Phosphide on Gallium Phosphide Green)
  - NTE3011 (Diffused Yellow, Gallium Arsenide Phosphide on Gallium Phosphide Yellow)
- Low Power Consumption
- High Efficiency
- IC Compatible/Low Current Requirements
- Diffused Lens
- Wide Viewing Angle

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Reverse Voltage, V_R 5V

Continuous Forward Current, I_F

- NTE3007 . . . . . 40mA
  - Derate Linearly Above 25°C . . . . . 0.5mA/°C
- NTE3008 . . . . . 15mA
  - Derate Linearly Above 25°C . . . . . 0.2mA/°C
- NTE3009, NTE3010 . . . . . 30mA
  - Derate Linearly Above 25°C . . . . . 0.4mA/°C
- NTE3011 . . . . . 20mA
  - Derate Linearly Above 25°C . . . . . 0.25mA/°C

Peak Forward Current (1.10 Duty Cycle, 0.1ms Pulse Width), I_F

- NTE3007 . . . . . 200mA
- NTE3008 . . . . . 60mA
- NTE3009, NTE3010 . . . . . 120mA
- NTE3011 . . . . . 80mA

Power Dissipation, P_D

- NTE3007 . . . . . 80mW
- NTE3008 . . . . . 40mW
- NTE3009, NTE3010 . . . . . 100mW
- NTE3011 . . . . . 60mW

Operating Temperature Range, T_{opr} . . . . . –55° to +100°C

Storage Temperature Range, T_{stg} . . . . . –55° to +100°C

Lead Temperature (During Soldering, .063 (1.6mm) from boby, 5sec max), T_L . . . . . +260°C

Note 1. **NTE3007, NTE3008, NTE3009** and **NTE3010** are a **discontinued** devices and **no longer available**.

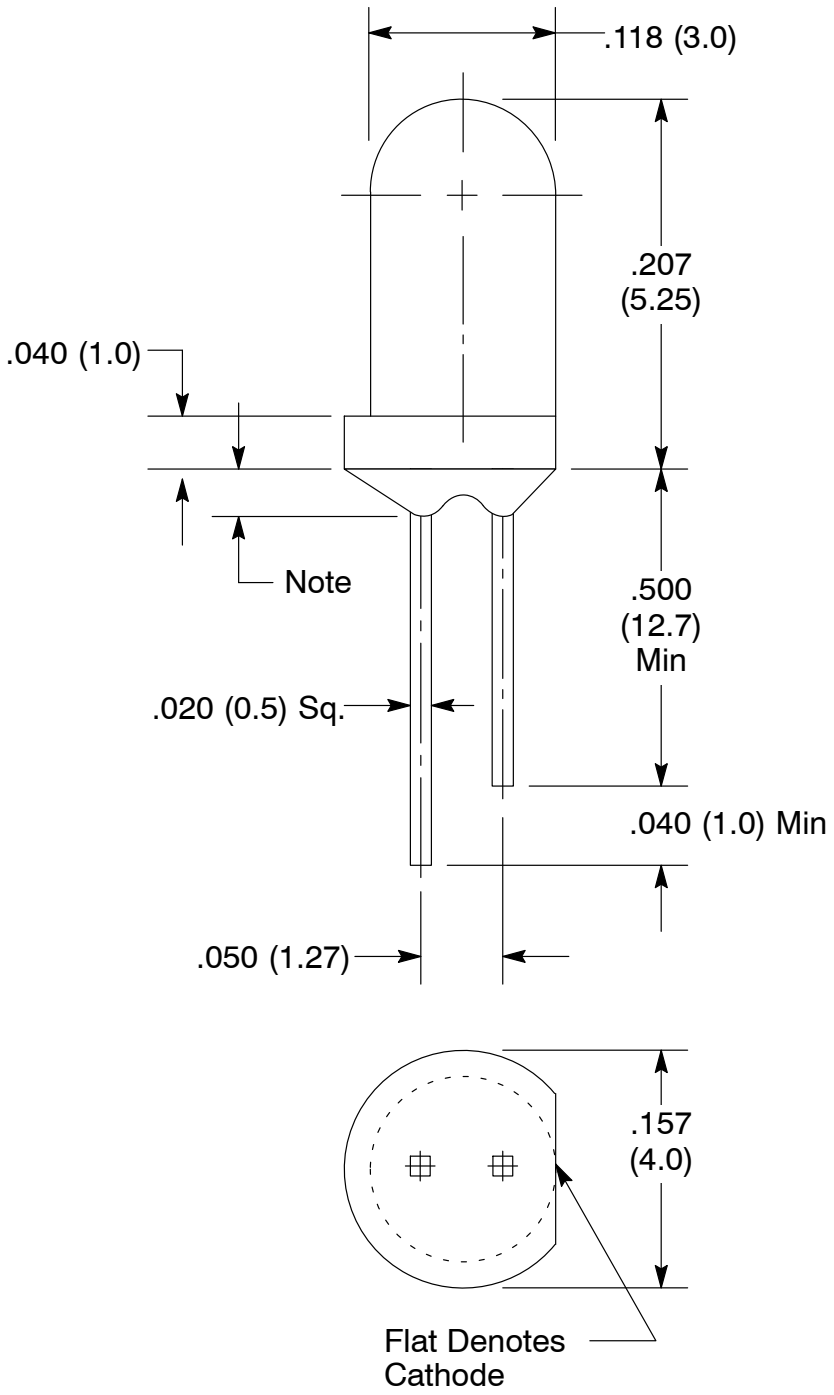
Rev. 5–19

Electro−Optical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage NTE3007	V_F	I_F = 20mA	–	1.7	2.0	V
NTE3008, NTE3010, NTE3011			–	2.1	2.8	V
NTE3009			–	2.0	2.8	V
Reverse Current	I_R	V_R = 5V	–	–	100	μA
Luminous Intensity NTE3007	I_V	I_F = 10mA, Note 2	0.3	0.8	–	mcd
NTE3008			0.4	1.1	–	mcd
NTE3009			0.8	3.5	–	mcd
NTE3010, NTE3011			0.8	3.8	–	mcd
Peak Emission Wave Length NTE3007	λ_P	Measurement @ Peak	–	655	–	nm
NTE3008			–	697	–	nm
NTE3009			–	630	–	nm
NTE3010			–	565	–	nm
NTE3011			–	585	–	nm
Spectral Line Half Width NTE3007	$\Delta\lambda$		–	24	–	nm
NTE3008			–	90	–	nm
NTE3009			–	40	–	nm
NTE3010			–	30	–	nm
NTE3011			–	35	–	nm
Viewing Angle	$2\theta^1/_2$	Note 3	–	72	–	deg.
Capacitance NTE3007	C	V_F = 0, f = 1MHz	–	30	–	pF
NTE3008			–	55	–	pF
NTE3009			–	20	–	pF
NTE3010			–	35	–	pF
NTE3011			–	15	–	pF

Note 2. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission Internationale De L'Eclairage) eye−response curve.

Note 3. Viewing Angle is the off−axis angle at which the luminous intensity is half the axial luminous intensity.



Note: Protruded resin under flange is .059 (1.5) max